ABSTRACTS

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Abstracts

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2680. International Cartel Enforcement: Lessons from the 1990s

Simon J. Evenett, Margaret C. Levenstein, and Valerie Y. Suslow
(September 2001)

Enforcement against international cartels surged in the late 1990s. Despite this enforcement activity, there are good reasons to doubt that national laws sufficiently deter cartel formation.

The enforcement record of the 1990s shows that private international cartels are not defunct—nor do they always fall quickly under the weight of their own incentive problems. Of a sample of 40 such cartels prosecuted by the United States and the European Union in the 1990s, 24 lasted at least four years. And for the 20 cartels in this sample where sales data are available, the annual worldwide turnover in affected products exceeded $30 billion.

National competition policies address harm in domestic markets, and in some cases prohibit cartels without taking strong enforcement measures. Evenett, Levenstein, and Suslow propose a series of reforms to national policies and steps to enhance international cooperation that will strengthen the deterrents against international cartelization. Furthermore, the authors argue that aggressive prosecution of cartels must be complemented by vigilance in other areas of competition policy. If not, firms will respond to the enhanced deterrents to cartelization by merging or by taking other measures that lessen competitive pressures.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to understand the consequences of national competition policies in a globalizing world. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, room MC3-333 telephone 202-473-2727, fax 202-522-1159, email address pflewitt@worldbank.org. Policy Research Working Papers are also posted on the Web at http:/econ.worldbank.org. The authors may be contacted at sevenett @worldbank.org, mlevenstein@mediaone.net, or suslow@bus.umich.edu. (34 pages)

2681. On the Duration of Civil War

Paul Collier, Anke Hoeffler, and Måns Söderbom
(September 2001)

The duration of large-scale, violent civil conflict increases substantially if the society is composed of a few large ethnic groups, if there is extensive forest cover, and if the conflict has commenced since 1980. None of these factors affects the initiation of conflict. And neither the duration nor the initiation of conflict is affected by initial inequality or political repression.

Collier, Hoeffler, and Söderbom model the duration of large-scale, violent civil conflicts, applying hazard functions to a comprehensive data set on such conflicts for the period 1960–99. They find that the duration of conflicts is determined by a substantially different set of variables than those that determine their initiation. The duration of conflict increases substantially if the society is composed of a few large ethnic groups, if there is extensive forest cover, and if the conflict has commenced since 1980. None of these factors affects the initiation of conflict.

The authors also find that neither the duration nor the initiation of conflict is affected by initial inequality or political repression. This finding is consistent with the hypothesis that rebellions are initiated where they are viable during conflict, regardless of the prospects of attaining post-conflict goals, and that they persist unless circumstances change.

This paper—a product of the Office of the Director, Development Research Group—is part of a larger effort in the group to study large scale violent conflict. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paul Collier, mail stop MC3-304, telephone 202-458-8208, fax 202-522-1150, email address pcollier@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The other authors may be contacted at anke.hoeffler@ox.ec.ac.uk, or mans.soderbom@ox.ec.ac.uk. (29 pages)

2682. Deposit Insurance and Financial Development

Robert Cull, Lemma W. Senbet, and Marco Sorge
(September 2001)

Do deposit insurance programs contribute to financial development? Yes, but only if the regulatory environment is sound.

Cull, Senbet, and Sorge examine the effect of different design features of deposit insurance on long-run financial development, defined to include the level of financial activity, the stability of the banking sector, and the quality of resource allocation. Their empirical analysis is guided by recent theories of banking regulation that employ an agency framework.

The authors examine the effect of deposit insurance on the size and volatility of the financial sector in a sample of 58 countries. They find that generous deposit insurance leads to financial instability in lax regulatory environments. But in sound regulatory environments, deposit insurance does have the desired impact on financial development and growth.

Thus countries introducing a deposit insurance scheme need to ensure that it is accompanied by a sound regulatory framework. Otherwise, the scheme will likely lead to instability and deter financial development. In weak regulatory environments, policymakers should at least limit deposit insurance coverage.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to design financial safety nets for developing countries. The study was funded by the Bank's Research Support Budget under the research project "Deposit Insurance" (RPO 682-90). Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Kari Labrie, mail stop MC3-300, telephone 202-473-1001, fax 202-522-1155, email address klabrie@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Robert Cull may be contacted at rcull@worldbank.org. (61 pages)

2683. Financial Policies and the Prevention of Financial Crises in Emerging Market Economies

Frederic S. Mishkin
(October 2001)

In recent years we have seen a growing number of banking and financial crises in emerging market countries, with great costs to their economies. But we now have a much better understanding of why these crises occur and a better idea how they can be prevented.

Mishkin defines a financial crisis as a disruption in financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities. As financial markets become unable to function efficiently, economic activity sharply contracts. Factors that promote financial crises include, mainly, a deterioration in financial sector balance sheets, increases in interest rates and in uncertainty, and deterioration in nonfinancial balance sheets because of changes in asset prices.

Financial policies in 12 areas could help make financial crises less likely in emerging market economies, says Mishkin. He discusses:

- Prudential supervision.
- Accounting and disclosure requirements.
- Legal and judicial systems.
- Market-based discipline.
- Entry of foreign banks.
- Capital controls.
- Reduction of the role of state-owned financial institutions.
- Restrictions on foreign-denominated debt.
- The elimination of too-big-to-fail practices in the corporate sector.
- The proper sequencing of financial liberalization.
- Monetary policy and price stability.
- Exchange rate regimes and foreign exchange reserves.

If the political will to adopt sound policies in these areas grows in emerging market economies, their financial systems should become healthier, with substantial gains both from greater economic growth and smaller economic fluctuations.

This paper—a product of the Financial Sector Strategy and Policy Department—was prepared for the NBER conference, "Economic and Financial Crises in Emerging Market Economies," Woodstock, Vermont, October 19–21, 2001. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Rose Vo, room MC9-624, telephone 202-473-3722, fax 202-522-2031, email address hvo1@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at fsm3@columbia.edu. (41 pages)

2684. From Monetary Targeting to Inflation Targeting: Lessons from Industrialized Countries

Frederic S. Mishkin
(October 2001)

Experience with monetary targeting suggests that although it successfully controlled inflation in Switzerland and especially Germany, the special conditions that made it work reasonably well in those two countries are unlikely to be satisfied elsewhere. Inflation targeting is more likely to improve economic performance in countries that choose to have an independent domestic monetary policy, but there are subtleties in how inflation targeting is done. Lessons from industrial countries should be useful to central banks designing a framework for monetary policy.

Mishkin examines changes in monetary policy in industrial countries by evaluating and providing case studies of monetary targeting and inflation targeting.

Inflation targeting has successfully controlled inflation, with some qualifications. It weakens the effects of inflationary shocks, as examples from Canada, Sweden, and the United Kingdom show. It can promote growth and does not lead to increased fluctuations in output. But inflation targets do not necessarily reduce the cost of reducing inflation.

The key to the success of inflation targeting is its stress on transparency and communication with the public. Inflation targeting increases accountability, which helps ameliorate the time-inconsistency trap (in which the central bank tries to expand output and employment in the short run by pursuing overly expansionary monetary policy). Time-inconsistency is more likely to come from political pressures on the central bank to engage in overly expansionary monetary policy. A key advantage of inflation targeting is that it helps focus the political debate on what a central bank can do in the long run (control inflation) rather than what it cannot do (raise economic growth and the number of jobs permanently through expansionary monetary policy).

By increasing transparency and accountability, inflation targeting helps promote central bank independence. Accountability to the general public seems to work as well as direct accountability to the government. Inflation targeting is consistent with democratic principles.

In discussing operational design, Mishkin explains, among other things, that

- Inflation targeting is far from a rigid rule.
- Inflation targets have always been above zero with no loss of credibility.
- Inflation targeting does not ignore traditional stabilization goals.
- Avoiding undershoots of the inflation target is as important as avoiding overshoots.
- When inflation is initially high, inflation targeting may have to be phased in after disinflation.
- The edges of the target range can take on a life of their own.
- Targeting asset prices such as the exchange rate worsens performance.

This paper—a product of the Financial Sector Strategy and Policy Department—was prepared for the Bank of Mexico conference "Stabilization and Monetary Policy: The International Experience," Mexico City, November 14–15, 2000. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Rose Vo, room MC9-624, telephone 202-473-3722, fax 202-522-2031, email address hvo1@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at fsm3@columbia.edu. (35 pages)

2685. Monetary Policy Strategies for Latin America

Frederic S. Mishkin
and Miguel A. Savastano
(October 2001)

Instead of focusing the debate about the conduct of monetary policy on whether the *nominal exchange rate should be fixed or flexible, the focus should be on whether the monetary policy regime appropriately constrains discretion in monetary policymaking. Three frameworks deserve serious discussion as possible long-run strategies for monetary policy in Latin America: A hard exchange-rate peg, monetary targeting, and inflation targeting.*

Mishkin and Savastano examine possible monetary policy strategies for Latin America that may help lock in the gains the region attained in the fight against inflation in the 1990s. Instead of focusing the debate about the conduct of monetary policy on whether the nominal exchange rate should be fixed or flexible, the focus should be on whether the monetary policy regime appropriately constrains discretion in monetary policymaking.

Three basic frameworks deserve serious discussion as possible long-run strategies for monetary policy in Latin America. Mishkin and Savastano examine the advantages and disadvantages of a hard exchange-rate peg, monetary targeting, and inflation targeting, in light of monetary policy's recent track record in several Latin American countries, looking for clues about which of the strategies might be best suited to economies in the region.

The answer: It depends on the country's institutional environment.

Some countries appear not to have the institutions to constrain monetary policy if discretion is allowed. In those countries, there is a strong argument for hard pegs, including full dollarization, that allow little or no discretion to monetary authorities.

In countries such as Chile, which can constrain discretion, inflation targeting is likely to produce a monetary policy that keeps inflation low yet appropriately copes with domestic and foreign shocks.

Monetary targeting as a strategy for Latin America is not viable because of the likely instability of the relationship between inflation and monetary aggregates, of which there is ample international evidence.

No monetary strategy can solve the basic problems that have existed in Latin American economies for a long time. Mishkin and Savastano welcome the recent move in Latin American countries toward inflation targeting, but say no policy will succeed unless government polices also create the right institutional environment.

This paper—a product of the Financial Sector Strategy and Policy Department—was prepared for the Interamerican Seminar on Economics, Buenos Aires, December 2–4, 1999. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Rose Vo, room MC9-624, telephone 202-473-3722, fax 202-522-2031, email address hvo1@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Frederic Mishkin may be contacted at fsm3@columbia.edu. (31 pages)

2686. Education, Earnings, and Inequality in Brazil, 1982–98: Implications for Education Policy

Andreas Blom, Lauritz Holm-Nielsen, and Dorte Verner
(October 2001)

Improving access to tertiary education in Brazil would expand the supply of highly skilled labor—now too small to meet demand—enhancing prospects for both greater economic growth and lower wage inequality.

The educational attainment of Brazil's labor force has gradually increased over the past two decades. At the same time, the government has pursued a series of economic structural adjustment policies. Blom, Holm-Nielsen, and Verner investigate how these simultaneous advances have altered the relationship between labor market earnings and education.

They find that the returns to education in the labor market fundamentally changed between 1982 and 1998. While the returns to tertiary education increased sharply, the returns to primary education dropped by 26 percent and those to lower secondary by 35 percent. Moreover, the authors argue, the marginal reduction in wage inequality that occurred in this period was linked primarily to a reduction in the returns to schooling and only secondarily to a more equitable distribution of schooling.

The findings suggest that the supply of highly skilled labor is inadequate to meet demand. That suggests a need for policy action aimed at increasing access to and completion of tertiary education. Increasing the supply of highly skilled labor would improve prospects for both economic growth and reduced wage inequality.

This paper—a product of the Education Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to assess the need for expansion of the education system, in particular, tertiary education. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Samia Benbouzid, room I7-046, telephone 202-458-8469, fax 202-522-0050, email address sbenbouzid@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at ablom@worldbank.org, lholmnielsen@worldbank.org, or dverner@worldbank.org. (54 pages)

2687. Geographic Patterns of Land Use and Land Intensity in the Brazilian Amazon

Kenneth M. Chomitz and Timothy S. Thomas
(October 2001)

Nearly 90 percent of agricultural land in the Brazilian Amazon is used for pasture, or has been cleared and left unused. Pasture on average is used with very low productivity. Analysis based on census tract data shows that agricultural conversion of forested areas in the wetter Western Amazon would be even less productive, using current technologies.

Using census tract data from the Censo Agropecuario 1995–96, Chomitz and Thomas map indicators of current land use and agricultural productivity across Brazil's Legal Amazon. These data permit geographical resolution about 10 times finer than afforded by *municipio* data used in previous studies. Chomitz and Thomas focus on the extent and productivity of pasture, the dominant land use in Amazonia today.

Simple tabulations suggest that most agricultural land in Amazonia yields little private economic value. Nearly 90 percent of agricultural land is either devoted to pasture or has been out of use for more than four years. About 40 percent of the currently used pastureland has a stocking ratio of less than 0.5 cattle per hectare. Tabulations also show a skewed distribution of land ownership: almost half of Amazonian farmland is located in the 1 percent of properties that contain more than 2,000 hectares.

Multivariate analyses relate forest conversion and pasture productivity to precipitation, soil quality, infrastructure and market access, proximity to past conversion, and protection status. Chomitz and Thomas find precipitation to have a strong deterrent effect on agriculture. The probability that land is currently claimed, or used for agriculture, or intensively stocked with cattle, declines substantially with increasing precipitation levels, holding other factors (such as road access) constant. Proxies for land abandonment are also higher in high rainfall areas. Together these findings suggest that the wetter Western Amazon is inhospitable to exploitation for pasture, using current technologies.

On the other hand, land conversion and stocking rates are positively correlated with proximity to past clearing. This suggests that in the areas of active deforestation in eastern Amazonia, the frontier is not "hollow" and land use intensifies over time. But this area remains a mosaic of lands with higher and lower potential agricultural value.

This paper—a product of Infrastructure and Environment, Development Research Group—is part of a larger effort in the group to understand the causes and consequences of land use change. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Shannon Hendrickson, room MC3-640, telephone 202-473-7118, fax 202-522-0932, email address shendrickson@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at kchomitz@worldbank.org or tthomas2@worldbank.org. (38 pages)

2688. Aid, Shocks, and Growth

Paul Collier and Jan Dehn
(October 2001)

Not surprisingly, extreme negative export price shocks reduce growth. But these adverse effects can be mitigated through offsetting increases in aid. Indeed, targeting aid to countries experiencing negative shocks appears to be even more important for aid effectiveness than targeting aid to countries with good policies.

Analysis of the relationship between aid and growth by Burnside and Dollar found that the better a country's policies, the more effective aid is in raising growth in that country. But this result has been criticized for being sensitive to choice of sample and for neglecting shocks.

Collier and Dehn incorporate export price shocks into the analysis of aid's effect on growth. They construct export price indices using the approach pioneered by Deaton and Miller. They locate shocks by differencing the indices, removing predictable elements from the stationary process, and normalizing the residuals. Extreme negative shocks are the bottom 2.5 percent tail of this distribution.

Introducing these extreme shocks into the Burnside-Dollar regression, the authors find that they are highly significant: unsurprisingly, extreme negative shocks reduce growth. Once these shocks are included, the Burnside-Dollar results become robust to choice of sample. Moreover, the adverse effects of negative shocks on growth can be mitigated through offsetting increases in aid. Indeed, targeting aid to countries experiencing negative shocks appears to be even more important for aid effectiveness than targeting aid to countries with good policies. But the authors show that, overall, donors have not used aid for this purpose.

This paper—a product of the Office of the Director, Development Research Group—is part of a larger effort in the group to assess the impact of aid. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Audrey Kitson-Walters, room MC3-304, telephone 202-473-3712, fax 202-522-1150, email address akitsonwalters@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at pcollier@worldbank.org or jandehn@yahoo.com. (21 pages)

2689. Global Trade and Food Safety: Winners and Losers in a Fragmented System

John S. Wilson and Tsunehiro Otsuki
(October 2001)

How food safety is addressed in the world trade system is critical for developing countries that continue to rely on agricultural exports. An analysis shows that adopting a worldwide standard for a toxin affecting nuts and grains could increase trade in these commodities by $38 billion compared with levels under today's widely divergent national standards.

Food safety standards and the tradeoff between these standards and agricultural export growth are at the forefront of the trade policy debate. How food safety is addressed in the world trade system is critical for developing countries that continue to rely on agricultural exports. In a fragmented system of conflicting national food safety standards and no globally accepted standards, export prospects for the least developed countries can be severely limited.

Wilson and Otsuki examine the impact that adopting international food safety standards and harmonizing standards would have on global food trade patterns. They estimate the effect of aflatoxin standards in 15 importing countries (including 4 developing countries) on exports from 31 countries (21 of them developing). Aflatoxin is a natural substance that can contaminate certain nuts and grains when storage and drying facilities are inadequate.

The analysis shows that adopting a worldwide standard for aflatoxin B1 (potentially the most toxic of aflatoxins) based on current international guidelines would increase nut and cereal trade among the countries studied by $6.1 billion compared with 1998 levels. This harmonization of standards would increase world exports by $38.8 billion.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to expand empirical and policy understanding of the link between trade, development, and standards. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, room MC3-333, telephone 202-473-2727, fax 202-522-1159, email address pflewitt@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at jswilson@worldbank.org or totsuki@worldbank.org. (34 pages)

2690. Ringing in the 20th Century: The Effects of State Monopolies, Private Ownership, and Operating Licenses on Telecommunications in Europe, 1892–1914

Scott Wallsten
(October 2001)

For many countries, recent reforms in telecommu-nications represent a restoration of the private provision and competition that prevailed in the early part of the 20th century. At that time, just as today, telephone service in countries with competing private providers was superior to service in countries with a state-owned monopoly.

Countries around the world are liberalizing their telecommunications networks by privatizing incumbent state-owned firms and introducing competition. For many, this change represents a return to private provision and competition—not a new phenomenon. The beginning of the 20th century saw great variation in the structure of telecommunications sectors, with some countries operating state monopolies and others—especially in Scandinavia—allowing vigorous private competition.

Wallsten uses data on countries around the world in 1913 and on European countries in 1892–1914 to test the effects of government monopolies, private provision, and operating licenses on telephone development. Controlling for per capita income and, where possible, for country and year fixed effects, he finds that state monopoly provision is correlated with substantially lower telephone penetration and higher consumer prices for long-distance service than private provision. Contrary to conventional wisdom, rural service was also worse under state-owned monopolies. Operating licenses that gave the state the right to appropriate firms' assets similarly led to lower telephone penetration and higher prices.

This paper—a product of Regulation and Competition Policy, Development Research Group—is part of a larger effort in the group to examine the effects of telecommunications privatization and liberalization in the developing world. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Sintim-Aboagye, room MC3-422, telephone 202-473-7644, fax 202-522-1155, email address psintimaboagye@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at swallsten@worldbank.org. (32 pages)

2691. Evolution of Earnings and Rates of Returns to Education in Mexico

Gladys López-Acevedo
(October 2001)

Inequality in education accounts for a large share of the inequality in earnings in Mexico. But the increase in earnings inequality does not appear to reflect a worsening in the distribution of education. The cause instead appears to be skill-biased technological change facilitated by increased economic openness.

Reviewing the factors and mechanisms that have been driving inequality in earnings in Mexico, López-Acevedo finds that inequality in education accounts for the largest share by far of the variation in earnings. In fact, the contribution of educational inequality to earnings inequality in Mexico ranks second in size in Latin America, after that in Brazil, and its significance has been increasing. Moreover, the income effect is always prevalent, and the distribution of education is highly significant even after controlling for changes in other relevant variables, such as age, region, economic sector, and labor market status.

But the increase in earnings inequality in Mexico does not appear to be the result of a worsening in the distribution of education—although the income profile, which is related to returns to schooling, has become much steeper. This means that the shift in demand toward high-skilled labor has not been matched by an increase in supply. The probable reason: the increased economic openness in Mexico has facilitated skill-biased technological change.

This paper—a product of the Poverty Reduction and Economic Management Sector Unit, and the Mexico-Colombia-Venezuela Department —is part of a larger effort in the region to reduce poverty and inequality. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Michael S. Geller, room I4-046, telephone 202-458-5155, fax 202-522-2112, email address mgeller@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at gacevedo@worldbank. (62 pages).

2692. Introduction to Property Theory: The Fundamental Theorems

David Ellerman
(October 2001)

This paper inaugurates the mathematical treatment of property theory, proving the two fundamental theorems for the property system that correspond to the two fundamental theorems for the competitive price system.

The market system consists of a price mechanism built on the foundation of a system of property and contract. In many developing and transition economies the market system functions poorly. In many cases, if not most, the malfunctioning is not simply in the price system (for example, anti-competitive activities) but in the underlying property system (such as contracts being breached, and externalities in the sense of transfers not covered by contracts).

Economic theory tends to take the functioning of the system of property and contract for granted and focuses on the operation of the price mechanism. Property theory focuses on that underlying system of property and contract.

In this paper Ellerman inaugurates the mathematical treatment of property theory. In contrast with earlier work in "law and economics" and the "new institutional economics," this approach uses principles drawn from jurisprudence and does not attempt to reduce "law" to "economics" in the sense of efficiency considerations such as the minimization of transactions costs. The main results are the two fundamental theorems of property theory that are analogous to the two fundamental theorems of price theory that, in essence, state that:

- A competitive equilibrium is Pareto optimal.
- Given a Pareto optimal state, there exists a set of prices such that a competitive equilibrium at those prices would realize that Pareto optimal state.

This paper—a product of the Office of the Senior Vice President, Development

Economics—is part of a larger effort in the Bank to understand the institutional basis for a private property market economy. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Beza Mekuria, room MC4-358, telephone 202-458-2756, fax 202-522-1158, email address bmekuria@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at dellerman @worldbank.org. (26 pages)

2693. Helping People Help Themselves: Toward a Theory of Autonomy-Compatible Help

David Ellerman
(October 2001)

How can an outside party ("helper") assist those attempting to undertake autonomous activities (the "doers") without overriding or undercutting their autonomy? The answers could have implications for the helping agency itself.

If development is seen basically as autonomous self-development, then there is a subtle paradox in the whole notion of development assistance: How can an outside party ("helper") assist those undertaking autonomous activities (the "doers") without overriding or undercutting their autonomy? This conundrum is the challenge facing a theory of autonomy-compatible development assistance—that is, helping theory.

Starting from a simple model of nondistortionary aid, Ellerman explores several themes of a broader helping theory and shows how these themes arise in the work of "gurus" in different fields—John Dewey in pedagogy and social philosophy, Douglas McGregor in management theory, Carl Rogers in psychotherapy, Søren Kierkegaard in spiritual counseling, Saul Alinsky in community organizing, Paulo Freire in community education, and Albert Hirschman and E. F. Schumacher in economic development. That such diverse thinkers in such different fields arrive at very similar conclusions increases confidence in the common principles. The points of commonality are summarized as follows:

- Help must start from the present situation of the doers.
- Helpers must see the situation through the eyes of the doers.
- Help cannot be imposed on the doers, as that directly violates their autonomy.
- Nor can doers receive help as a benevolent gift, as that creates dependency.
- Doers must be in the driver's seat.

One major application of helping theory is to the problems of knowledge-based development assistance. The standard approach is that the helper, a knowledge-based development agency, has the "answers" and disseminates them to the doers. This corresponds to the standard teacher-centered pedagogy. The alternative under helping theory is the learner-centered approach. The teacher plays the role of midwife, catalyst, and facilitator, building learning capacity in the learner-doers so that they can learn from any source, including their own experience.

Development assistance is further complicated by the local or tacit nature of much relevant knowledge. A knowledge-based development agency might function better not simply as a source of knowledge but as a broker connecting those who face problems with those in similar situations who have learned how to address the problems.

Changing to the approach of helping theory entails changing the helping agency itself, transforming it into an organization that fosters learning internally as well as externally—as in a university, where professors engage in learning and foster learning in students but the organization does not adopt official views on the complex questions of the day. This means fostering competition in the marketplace of ideas within the organization and taking a more Socratic stance with clients, who will then have to take responsibility for and have ownership of their decisions.

This paper—a product of the Office of the Senior Vice President, Development Economics—is part of a larger effort in the Bank to understand the intellectual foundations for autonomy-compatible assistance as espoused in the Comprehensive Development Framework and the Bank's Mission Statement. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Beza Mekuria, room MC4-358, telephone 202-458-2756, fax 202-522-1158, email address bmekuria @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at dellerman @worldbank.org. (48 pages)

2694. Financial Development and Financing Constraints: International Evidence from the Structural Investment Model

Inessa Love
(October 2001)

Microeconomic evidence from 40 countries shows that financial development aids growth by reducing financing constraints that would otherwise restrict efficient firm investment.

The relationship between the financial and real sides of the economy has long been a topic of intense interest and debate. Love provides microeconomic evidence that financial development aids growth by reducing financing constraints that would otherwise restrict efficient firm investment.

The author estimates a structural model based on the Euler equation for investment using firm-level data from 40 countries. The results show a strong negative relationship between the extent of financial market development and the sensitivity of investment to the availability of internal funds (a proxy for financing constraints).

Considering size effects, business cycles, and the legal environment as plausible alternative explanations, the author finds the results to be robust in all cases.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to study the determinants of access to finance. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Kari Labrie, room MC3-456, telephone 202-473-1001, fax 202-522-1155, email address klabrie @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at ilove@worldbank.org. (49 pages)

2695. Trade Credit, Financial Intermediary Development, and Industry Growth

Raymond Fisman and Inessa Love
(October 2001)

Where do firms turn for financing in countries with poorly developed financial markets? One source is trade credit. And where *formal financial intermediaries are deficient, industries that rely more on this source of financing grow faster.*

Recent empirical work has shown that financial development is important for economic growth, since well-developed financial markets are more effective at allocating capital to firms with high-value projects. This raises the question of whether firms with high-return projects in countries with poorly developed financial institutions are able to draw on alternative sources of capital to offset the effects of deficient (formal) financial intermediaries. Recent work suggests that implicit borrowing in the form of trade credit may provide one such source of funds.

Using the methodology of Rajan and Zingales (1998), Fisman and Love show that in countries with relatively weak financial institutions, industries with greater dependence on trade credit financing (measured by the ratio of accounts payable to total assets) grow faster than industries that rely less on such credit. Furthermore, consistent with the notion that young firms may not use trade credit, the authors show that most of the effect they report comes from growth in preexisting firms rather than from an increase in the number of firms.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to study the determinants of access to finance. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Kari Labrie, room MC3-456, telephone 202-473-1001, fax 202-522-1155, email address klabrie @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at rf250@columbia.edu or ilove@worldbank.org. (29 pages)

2696. Firms as Financial Intermediaries: Evidence from Trade Credit Data

Asll Demirgüç-Kunt and Vojislav Maksimovic
(October 2001)

Trade credit can be an important complement to lending by financial intermediaries.

Demirgüç-Kunt and Maksimovic argue that nonfinancial firms act as intermediaries by channeling short-term funds from the financial institutions in an economy to their best use. Nonfinancial firms act in this way because they may have a comparative advantage in exploiting informal means of ensuring that borrowers repay.

These considerations suggest that to optimally exploit their advantage in providing trade credit to some classes of borrowers, firms should obtain external financing from financial intermediaries and markets when this is efficient. Thus the existence of a large banking system is consistent with these considerations.

Using firm-level data for 39 countries, the authors compute turnovers in payables and receivables and examine how they differ across financial systems. They find that the development level of a country's legal infrastructure and banking system predicts the use of trade credit. Firms' use of bank debt is higher relative to their use of trade credit in countries with efficient legal systems. But firms in countries with large, privately owned banking systems offer more financing to their customers and take more financing from them.

The authors' findings suggest that trade credit is a complement to lending by financial intermediaries and should not be viewed by policymakers as a substitute.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to understand firm financing constraints. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Kari Labrie, room MC3-456, telephone 202-473-1001, fax 202-522-1155, email address klabrie @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at ademirguckunt @worldbank.org or vmaksimovic @rhsmith.umd.edu. (47 pages)

2697. Regional Integration and Industrial Growth among Developing Countries: The Case of Three ASEAN Members

Dorsati H. Madani
(October 2001)

Has the revival of the Association of Southeast Asian Nations (ASEAN) in the early 1990s affected the industrial growth of Indonesia, Malaysia, and the Philippines? Perhaps not in the early years of the revival, primarily because of the countries' long history of intra-regional trade.

Has the revival of the Association of Southeast Asian Nations (ASEAN) in the early 1990s affected the industrial growth of Indonesia, Malaysia, and the Philippines? Madani uses two mechanisms to capture this potential impact: scale effects and intermediate imports variety. She performs the analysis on 22 industries (at the three-digit level of the International Standard Industrial Classification) over the period 1971–95.

The results show significant heterogeneity in industry-level returns to scale. Moreover, the three ASEAN members have very small, mostly negative cross-industry scale effects. As a result, they may not achieve large or across-the-board gains from their regional arrangement through scale effects.

The author finds unexpected results with respect to the role of intermediate imports variety in industrial growth. She finds no support for the hypothesis that nonregional (rest of world) suppliers and goods variety have a positive effect on ASEAN industries through the channel of imported intermediate inputs. The regional variety measure, however, seems to have a positive effect on the output growth of a handful of industries. This result seems due to the fact that these countries have long had a strong intra-regional and intra-industry trade, whose history predates and outweighs the ASEAN revival.

This paper—a product of Trade, Development Research Group—is part of a larger research project on regionalism. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, room MC3-333, telephone 202-473-2727, fax 202-522-1159, email address pflewitt@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at dmadani@worldbank.org. (39 pages)

2698. Foreign Bank Entry: Experience, Implications for Developing Countries, and Agenda for Further Research

George Clarke, Robert Cull, Maria Soledad Martinez Peria, and Susana M. Sánchez
(October 2001)

Foreign banks are playing an increasingly large role in many developing countries, holding more than 50 percent of banking assets in several of these countries. But important issues about foreign bank entry continue to be debated.

In recent years foreign bank participation has increased tremendously in several developing countries. In Argentina, Chile, the Czech Republic, Hungary, and Poland, for example, more than 50 percent of banking assets are now in foreign-controlled banks. In Asia, Africa, the Middle East, and the former Soviet Union the rate of entry by foreign banks has been slower, but the trend is similar.

Although the number of countries welcoming foreign banks is growing, many questions about foreign bank entry are still being debated, including:

- What draws foreign banks to a country?
- Which banks expand abroad?
- What do foreign banks do once they arrive?
- How does the mode of a bank's entry—for example, as a branch of its parent or as an independent subsidiary company—affect its behavior?

Clarke and his coauthors summarize current knowledge on these issues. In addition, since the existing literature focuses heavily on industrial countries, they put forth an agenda for further study of the effects of foreign bank entry in developing countries.

This paper—a product of the Office of the Senior Vice President, Development Economics—is a background paper for *World Development Report 2002: Institutions for Markets*. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Sintim-Aboagye, room MC3-422, telephone 202-473-8526, fax 202-522-1155, email address psintimaboagye@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at gclarke @worldbank.org, rcull@worldbank.org, mmartinezperia@worldbank.org, or ssanchez@worldbank.org. (41 pages)

2699. Benefits and Costs of International Financial Integration: Theory and Facts

Pierre-Richard Agénor
(October 2001)

This literature review joins with recent studies in arguing that financial integration must be carefully prepared and managed to ensure that the benefits outweigh the short-run risks. But in contrast with some other studies, it adopts a more skeptical view of the benefits of capital flows other than foreign direct investment.

Agénor provides a selective review of the recent analytical and empirical literature on the benefits and costs of international financial integration. He discusses the impact of financial openness on consumption, investment, and growth, and the impact of foreign bank entry on the domestic financial system.

Consistent with some recent studies, the author argues that financial integration must be carefully prepared and managed to ensure that the benefits outweigh the short-run risks. Prudent macroeconomic management, adequate supervision and prudential regulation of the financial system, greater transparency, and improved capacity to manage risk in the private sector are important requirements for coping with potentially abrupt reversals in pro-cyclical, short-term capital flows.

The author adopts a more skeptical view than some assessments in two areas, however. First, only foreign direct investment appears to provide dynamic gains and improved prospects for growth; the evidence on the benefits of other types of capital flows remains weak. Second, empirical research on the net benefits associated with foreign bank penetration is far from conclusive; in particular, the possibility that such penetration may lead to adverse changes in the allocation of credit among domestic firms cannot be dismissed on the basis of the existing evidence.

This paper—a product of the Economic Policy and Poverty Reduction Division, World Bank Institute—is part of a larger effort in the institute to analyze the impact of macroeconomic adjustment on poverty. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Maria Gosiengfiao, room J4-282, telephone 202-473-3363, fax 202-676-9810, email address mgosiengfiao@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at pagenor@worldbank.org. (62 pages)

2700. Business Cycles, Economic Crises, and the Poor: Testing for Asymmetric Effects

Pierre-Richard Agénor
(October 2001)

Analysis of data for Brazil suggests that poverty responds asymmetrically to output shocks, showing less tendency to fall in response to a positive shock when the economy is initially in a downturn.

Agénor examines whether output contractions associated with cyclical output fluctuations and economic crises have an asymmetric effect on poverty. He identifies four potential sources of asymmetry: expectations and confidence factors, credit rationing at the firm level (induced by either adverse selection problems or negative shocks to net worth), borrowing constraints at the household level, and the "labor hoarding" hypothesis. He also identifies some testable implications of these alternative explanations.

The author then proposes a vector autoregression technique (involving the detrended components of real output, the unemployment rate, real wages, and the poverty rate) to test whether the initial cyclical position of the economy, and the size of the initial drop in the output gap in a downturn, matter in assessing the extent to which output shocks affect poverty. He applies the technique to Brazil, using annual data for 1981–99. The results indicate that poverty responds asymmetrically to output shocks, showing less sensitivity when the economy is initially in a downturn.

This paper—a product of the Economic Policy and Poverty Reduction Division, World Bank Institute—is part of a larger effort in the institute to analyze the impact of macroeconomic adjustment on poverty. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Maria Gosiengfiao, room J4-282, telephone 202-473-3363, fax 202-676-9810, email address mgosiengfiao@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at pagenor@worldbank.org. (29 pages)

2701. Trade and Production, 1976–99

Alessandro Nicita and Marcelo Olarreaga
(November 2001)

A new database eases the way for researchers analyzing statistics on trade, production, and tariffs.

Nicita and Olarreaga have prepared this paper as a companion to the Trade and Production database, which contains trade, production, and tariff data for 67 industrial and developing countries at the industry level for 1976–99. The sector disaggregation in the database follows the International Standard Industrial Classification (ISIC), with data provided at the three-digit level (28 industries) for all 67 countries and at the four-digit level (81 industries) for 24 of these countries.

The production data are from the United Nations Industrial Development Organization's Industrial Statistics Database at the three- and four-digit level of ISIC. They include value added, total output, average wages, capital formation, number of employees, number of female employees, and number of firms.

The trade data are from the United Nations Statistics Division's Commodity Trade (Comtrade) database (through the World Bank's World Integrated Trade Solution, or WITS, software) and include imports and exports. Data on mirror exports (reported by trading partners) were obtained using WITS. The trade data are aggregated by region and income group, as defined by the World Bank. A separate data set provides bilateral trade flows (by partner) at the industry level.

The data on average tariffs (most favored nation) are from the Trains database maintained by the United Nations Conference on Trade and Development and from the World Trade Organization's Trade Policy Reviews and Integrated Database.

The database also provides an input-output table for each country using data from version 4 of the Global Trade Analysis Project (GTAP) database.

The database is available on request on CD-ROM in a series of ASCII files and Microsoft Excel worksheets. It is also available on the Web at http://www.worldbank.org./research/trade.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to study the determinants of trade patterns. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, room MC3-333, telephone 202-473-6986, fax 202-522-1159, email address pflewitt@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at anicita@worldbank.org or molarreaga@worldbank.org. (23 pages)

2702. Productivity versus Endowments: A Study of Singapore's Sectoral Growth, 1974–92

Hiau Looi Kee
(November 2001)

Productivity and factor endowments both play an important role in growth in Singapore's manufacturing industries. But productivity is more important as a source of growth in the electronics industry, while factor endowments make a larger contribution in other industries.

Productivity and the Rybczynski effects of factor endowments have been highlighted as the two main reasons behind the growth of newly industrializing economies in East Asia. However, empirical studies at the aggregate level do not find support for these claims.

Focusing on Singapore's manufacturing industries, Kee estimates the contributions of productivity and factor endowments to sectoral growth. The results show that both are important. But productivity is more important as a source of growth in the electronics industry, while factor endowments make a larger contribution in other industries.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to study the relationship between trade, productivity, and economic growth. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, room MC3-333, telephone 202-473-2727, fax 202-522-1159, email address pflewitt@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at hlkee@worldbank.org. (35 pages)

2703. Integrating Independent Power Producers into Emerging Wholesale Power Markets

Fiona Woolf and Jonathan Halpern
(November 2001)

Policymakers wishing to introduce wholesale competition into the electricity industry must often reconcile existing independent power producer contracts with new market structures and trading arrangements. For the new market arrangements to bring the benefits of competition to consumers, enough participants must be willing to take market risk. A combination of measures—adaptation of specific market rules, contractual alternatives for enhancing market liquidity, contract buyout provisions, transitional financing mechanisms—offer promise for reconciling existing contracts with new market structures and reducing the magnitude of above-market costs associated with the contracts.

Many developing and industrial countries have sought to open their electricity industries to competition. In both contexts, policymakers and investors have to deal with the consequences of earlier, more partial sector liberalization measures. Foremost among these is the existence of long-term contracts with independent power producers (IPPs). The long-term nature of these contracts has complicated the introduction of more far-reaching sectoral reform designed to harness competitive market forces for the benefit of consumers.

In developing countries, introducing competition is often coupled with breaking up and privatizing state-owned electricity monopolies. In this context, discussion of renegotiation of power purchase agreements has tended toward the polemical. At one end are those who resist any change, arguing that the "sanctity of contracts" precludes modification of contract terms. At the other end are those who favor governments taking coercive measures to modify existing contracts in the name of maximizing economic welfare and minimizing the burden of sector reform on consumers and on the state.

Drawing on recent country experiences, Woolf and Halpern analyze alternative approaches to restructuring contracts and designing power markets to reduce rigidities and incentivize IPPs to participate more fully in wholesale power markets and to take on greater market risk. The authors conclude that forced market integration or forced contract negotiation have failed and are counterproductive. Conversely, in countries where IPPs provide a sizable proportion of generation capacity, ignoring market integration may result in insufficient market liquidity and discourage new entry, attenuating the scope for market forces to act for the benefit of consumers. Failure to adapt power purchase contracts and market rules imposes huge resource costs on the economy beyond the financial obligations consumers and taxpayers must bear.

Based on recent experience, a combination of measures, including adaptation of specific market rules, contractual alternatives for enhancing market liquidity, contract buyout provisions, transitional financing mechanisms, and characteristics of the successor entity to the power purchaser, offer promising approaches for reconciling preexisting IPP contracts with new market structures and reducing the magnitude of above-market costs associated with such contracts.

This paper—a joint product of the Water and Sanitation Unit, Energy and Water Department, and the Finance, Private Sector, and Infrastructure Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the Bank to evaluate and disseminate lessons of experience in designing policies to improve the quality and sustainability of infrastructure services. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact the energy help desk, room F4K-190, telephone 202-473-0652, fax 202-522-3228, email address energyhelpdesk@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at fiona.woolf@cmck.com or jhalpern@worldbank.org. (37 pages)

2704. Regulatory Governance and Chile's 1998–99 Electricity Shortage

Ronald Fischer and Alexander Galetovic
(November 2001)

When the La Niña drought hit Chile in 1998–99, the country's recently reformed electricity sector suffered a price collapse. Power outages followed—but were they inevitable? No. The electricity shortage can be blamed on the rigid price system and deficient regulatory governance.

In the early 1980s Chile reformed its electricity sector, introducing a regulatory framework that became influential worldwide. But in 1998 and 1999 La Niña brought one of the worst droughts on record, causing a price system collapse, random power outages, and three-hour rotating electricity cuts.

Fischer and Galetovic study the interaction between regulatory incentives and governance during the 1998–99 electricity shortage, showing that the supply restriction could have been managed without outages. The shortage can be blamed on a rigid price system, which was unable to respond to large supply shocks, and on deficient regulatory governance, which led to a weak regulator unable to make the system work.

The authors also show that the regulator's weakness stemmed not from lack of formal powers but from vulnerability to lobbyists and a lack of independence. Moreover, the regulator seems not to have fully understood the incentives in the price system during supply restrictions.

The authors conclude that the Chilean shortage shows the limitations of a rigid price system requiring heavy regulatory intervention. This suggests that countries whose governance structures are ill suited to dealing with loopholes left by the law should rely as much as possible on market rules that clearly allocate property rights ex ante and leave the terms of contracts to be freely negotiated by private parties.

This paper—a product of Governance, Regulation, and Finance Division, World Bank Institute—is part of a larger effort in the institute to increase the understanding of infrastructure regulation. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Gabriela Chenet-Smith, room J3-304, telephone 202-473-6370, fax 202-676-9874, email address gchenet@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at rfischer@dii.uchile.cl or agaleto@dii.uchile.cl. (31 pages)

2705. Concession Contract Renegotiations: Some Efficiency versus Equity Dilemmas

Antonio Estache and Lucía Quesada
(November 2001)

If having firm-driven renegotiations of contracts for infrastructure services is a major concern, efficiency should not be the only consideration in selecting an operator. Indeed, consumers may want to award the concession to a less efficient firm if that would reduce the probability of renegotiation.

Estache and Quesada analyze the possibility of tradeoffs between efficiency and equity as well as the possibility of distributional conflicts in the context of renegotiation of infrastructure contracts in developing countries.

To do so, they present a model in which contracts are awarded by auctioning the right to operate an infrastructure service to a private monopoly, and consider the possibility of renegotiation. To identify the potential sources of tradeoffs, they track the possible outcomes of different renegotiation strategies for the monopoly running the concession and for the two groups of consumers—rich and poor—who alternate in power according to a majority voting rule.

Among the model's most important policy implications is this: if having firm-driven renegotiations is a major concern, efficiency should not be the only consideration in selecting an operator. Indeed, consumers may want to award the concession to a less efficient firm if that would reduce the probability of renegotiation, since a lower probability of firm-driven renegotiations (due to demand shocks, for example) is associated with higher welfare for all service users.

This paper—a product of the Governance, Regulation, and Finance Division, World Bank Institute—is part of a larger effort in the institute to increase understanding of infrastructure regulation. Copies of the paper are available free from

the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Gabriela Chenet-Smith, room J3-304, telephone 202-473-6370, fax 202-676-9874, email address gchenet@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at aestache@worldbank.org or lucia.quesada@univ-tlse1.fr. (30 pages)

2706. Household Income Dynamics in Rural China

Jyotsna Jalan and Martin Ravallion
(November 2001)

Is effective social protection an investment with long-term benefits? Does inequality impede growth? Household panel data on incomes in rural China offer some answers.

Theoretical work has shown that nonlinear dynamics in household incomes can yield poverty traps and distribution-dependent growth. If this is true, the potential implications for policy are dramatic: effective social protection from transient poverty would be an investment with lasting benefits, and pro-poor redistribution would promote aggregate economic growth.

Jalan and Ravallion test for nonlinearity in the dynamics of household incomes and expenditures using panel data for 6,000 households over six years in rural southwest China. While they find evidence of nonlinearity in the income and expenditure dynamics, there is no sign of a dynamic poverty trap.

The authors argue that existing private and social arrangements in this setting protect vulnerable households from the risk of destitution. However, their findings imply that the speed of recovery from an income shock is appreciably slower for the poor than for others. They also find that current inequality reduces future growth in mean incomes, though the "growth cost" of inequality appears to be small. The maximum contribution of inequality is estimated to be 4–7 percent of mean income and 2 percent of mean consumption.

This paper—a product of the Poverty Team, Development Research Group—is part of a larger effort in the group to better understand the dynamic processes influencing household welfare in risk-prone environments. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Catalina Cunanan, room MC3-542, telephone 202-473-2301, fax 202-522-1151, email address ccunanan@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at jjalan@worldbank.org or mravallion@worldbank.org. (28 pages)

2707. Financial Intermediary Development and Growth Volatility: Do Intermediaries Dampen or Magnify Shocks?

Thorsten Beck, Mattias Lundberg, and Giovanni Majnoni
(November 2001)

Panel data for 63 countries in 1960–97 reveal no robust relationship between the development of financial intermediaries and the volatility of growth.

Beck, Lundberg, and Majnoni extend the recent literature on the link between financial development and economic volatility by focusing on the channels through which the development of financial intermediaries affects economic volatility. Their theoretical model predicts that well-developed financial intermediaries dampen the effect of real sector shocks on the volatility of growth while magnifying the effect of monetary shocks—suggesting that, overall, financial intermediaries have no unambiguous effect on growth volatility.

The authors test these predictions in a panel data set covering 63 countries over the period 1960–97, using the volatility of terms of trade to proxy for real volatility, and the volatility of inflation to proxy for monetary volatility. They find no robust relationship between the development of financial intermediaries and growth volatility, weak evidence that financial intermediaries dampen the effect of terms of trade volatility, and evidence that financial intermediaries magnify the impact of inflation volatility in low- and middle-income countries.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to understand the links between the financial system and economic growth. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Yaptenco, room MC3-446, telephone 202-473-8526, fax 202-522-1155, email address ayaptenco@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at tbeck@worldbank.org, mlundberg@worldbank.org, or gmajnoni@worldbank.org. (48 pages)

2708. Accountability and Corruption: Political Institutions Matter

Daniel Lederman, Norman Loayza, and Rodrigo Reis Soares
(November 2001)

The results of a cross-country empirical analysis suggest that political institutions are extremely important in determining the prevalence of corruption: democracy, parliamentary systems, political stability, and freedom of the press are all associated with lower corruption.

Using a cross-country panel, Lederman, Loayza, and Soares examine the determinants of corruption, paying particular attention to political institutions that increase political accountability. Previous empirical studies have not analyzed the role of political institutions, even though both the political science and the theoretical economics literature have indicated their importance in determining corruption.

The main theoretical hypothesis guiding the authors' empirical investigation is that political institutions affect corruption through two channels: political accountability and the structure of the provision of public goods.

The results suggest that political institutions are extremely important in determining the prevalence of corruption: democracy, parliamentary systems, political stability, and freedom of the press are all associated with lower corruption. In addition, the authors show that common findings of the earlier empirical literature on the determinants of corruption—related to openness and legal tradition—do not hold once political variables are taken into account.

This paper—a product of the Office of the Chief Economist, Latin America and the Caribbean Region—is part of a larger effort to conduct research on pressing policy issues in the region. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Patricia Soto, room I8-018, telephone 202-473-7892, fax 202-522-7528, email address psoto@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at dlederman@worldbank.org or nloayza@worldbank.org. (37 pages)

2709. Explaining Leakage of Public Funds

Ritva Reinikka and Jakob Svensson
(November 2001)

Unique survey data are used to explain variation in leakage across schools.

Using panel data from a unique survey of public primary schools in Uganda, Reinikka and Svensson assess the degree of leakage of public funds in education. The survey data reveal that on average during 1991–95 schools received only 13 percent of the central government's allocation for the schools' nonwage expenditures. Most of the allocated funds were used by public officials for purposes unrelated to education or captured for private gain (leakage).

The survey data also reveal large variations in leakage across schools. A small set of school-specific variables can explain a significant part of this variation. Specifically, the authors find that larger schools receive a larger share of the intended funds per student. Schools with children of wealthier parents also experience a lower degree of leakage, while schools with a higher share of unqualified teachers receive less. After addressing potential selection and measurement issues, the authors show that these school characteristics have a quantitatively large impact on the degree of leakage.

The findings are consistent with the view that resource flows—and leakage—are endogenous to schools' sociopolitical endowment. Rather than being passive recipients of flows from government, schools use their bargaining power relative to other parts of government to secure greater shares of funding. Public resources are therefore not allocated according to the rules underlying the government's budget decisions, with obvious equity and efficiency implications.

The survey findings had a direct impact on policy in Uganda. As evidence on the degree of leakage became public knowledge, the central government enacted a number of changes: it began publishing monthly transfers of public funds to the districts in newspapers, broadcasting them on radio, and requiring schools to post information on inflow of funds. An initial assessment of these reforms shows that the flow of funds improved dramatically, from 13 percent on average reaching schools in 1991–95 to around 90 percent in 1999. These improvements emphasize the role of information in mobilizing "voice" for better public expenditure outcomes.

This paper—a product of Public Services for Human Development, Development Research Group—is part of a larger effort in the group to study the role of governance in the provision of public services. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedy Sladovich, room MC3-311, telephone 202-473-7698, fax 202-522-1154, email address hsladovich@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at rreinikka@worldbank.org or jakob.svensson@iies.su.se. (35 pages)

2710. Breaking up the Collective Farm: Welfare Outcomes of Vietnam's Massive Land Privatization

Martin Ravallion and Dominique van de Walle
(November 2001)

In the decollectivization of agriculture in Vietnam, local allocation of land use rights reduced overall inequality—thanks to initial conditions at the time of reform and actions by the center to curtail the power of local elites.

The decollectivization of agriculture in Vietnam was a crucial step in the country's transition to a market economy. But the assignment of land use rights had to be decentralized, and local cadres ostensibly had the power to corrupt this process.

Ravallion and van de Walle assess the realized land allocation against explicit counterfactuals, including the simulated allocation implied by a competitive market-based privatization. The authors find that 95–99 percent of maximum aggregate consumption (depending on the region) was realized by a land allocation that reduced overall inequality, with the poorest absolutely better off. They attribute this outcome to initial conditions at the time of reform and actions by the center to curtail the power of local elites.

This paper—a product of the Poverty Team and the Public Services for Human Development Team, Development Research Group—is part of a larger effort in the group to undertake ex-post assessments of the efficiency and equity implications of policy reforms. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Catalina Cunanan, room MC3-542, telephone 202-473-2301, fax 202-522-1151, email address ccunanan@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at mravallion@worldbank.org or dvandewalle@worldbank.org. (42 pages)

2711. Identifying Class Size Effects in Developing Countries: Evidence from Rural Schools in Bolivia

Miguel Urquiola
(November 2001)

Do smaller classes raise test scores? Evidence from rural schools in Bolivia suggests that they do.

Although class size has attracted great interest as a policy instrument, inferences on its effects are controversial. Recent work highlights a particular way to consider the endogeneity issues that affect this variable: class size is often correlated with enrollment, which may in turn be related to socioeconomic status.

In Bolivia, Urquiola shows, these correlations are significant. Building from institutional arrangements that determine pupil-teacher ratios in rural areas, the author implements two research designs to deal with this issue. The first uses a teacher allocation pattern as an instrumental variable; the second relies on variation from remote schools with a single class per grade. Both suggest that class size has a negative effect on test scores.

This paper—a product of Public Services for Human Development, Development Research Group—is part of a larger effort in the group to explore ways to improve service delivery in education, health, and social protection. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedy Sladovich, room mail stop MC3-311, telephone 202-473-7698, fax 202-522-1154, email address hsladovich@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at mu26 @cornell.edu. (39 pages)

2712. Contract Risks and Credit Spread Determinants in the International Project Bond Market

Mansoor Dailami and Robert Hauswald
(November 2001)

In infrastructure projects bondholders and shareholders share residual risks over time despite debt covenants meant to mitigate risk shifting. For projects accessing international bond markets to benefit from longer maturities and lower borrowing costs, it is therefore necessary to pay attention to such design features as capital structure, guarantees, offtake agreement, and project economics.

International bond markets have become an increasingly important source of long-term capital for infrastructure projects in emerging market economies over the past decade. The Ras Laffan Liquefied Natural Gas (Ras Gas) project represents a milestone in this respect: its $1.2 billion bond offering, completed in December 1996, has been the largest for any international project. The Ras Gas project has the right to extract, process, and sell liquefied natural gas (LNG) from a field off the shore of Qatar. The principal off-taker is the Korea Gas Corporation (Kogas), which resells most of the LNG to the Korea Electric Power Corporation (Kepco) for electricity generation.

In this clinical study Dailami and Hauswald analyze the determinants of credit spreads for the Ras Gas project in terms of its contractual structure, with a view to better understanding the role of contract design in facilitating access to the global project bond market. Market risk perceptions have long been recognized to be a function of firm-specific variables, particularly asset value as embodied in contracts. The authors therefore study the impact of three interlocking contracts on the credit spreads of the project's actively traded global bonds: the 25-year output sales and purchase agreement with Kogas-Kepco, the international bond covenant, and an output price–contingent debt service guarantee by Mobil to debt holders.

Using a sample of daily data from January 1997 to March 2000, the authors find that the quality of the off-taker's credit—and, more important, the market's assessment of the off-taker's economic prospects—drive project bond credit spreads and pricing. In addition, seemingly unrelated events in emerging debt markets spill over to project bond markets and affect risk perceptions and prices in this segment. Judicious use of an output price–contingent debt service guarantee by shareholders can significantly reduce project risks, and markets reward issuers through tighter credit spreads.

Bondholders and shareholders share residual risks over time, despite covenants meant to preempt risk shifting. This type of risk shifting originates from incomplete contracts and the nonrecourse nature of project finance. It does not necessarily result from a deliberate attempt by management to increase shareholder value at the expense of debt holders by pursuing high-risk, low-value activities, although project managers and shareholders could still exploit their informational advantages by leaving output supply contracts incomplete in ways beneficial to their private interests.

The results hold important lessons for global project finance. Projects incorporating certain design features can reap significant financial gains through lower borrowing costs and longer debt maturities:

- Judicious guarantees by parents that enjoy a particular hedging advantage enhance a project's appeal, as reflected in favorable pricing.
- Pledging receivables rather than physical assets as collateral and administering investor cash flows through an offshore account offers additional security to debt holders.
- Projects should use their liability structure to create an implicit option on future private debt financing that matches the real option of a project expansion.
- The finding that bondholders bear residual risks means that shareholders can reduce their risks arising from bilateral monopolies and buy insurance against unforeseen and unforeseeable events.

This paper—a product of the Governance, Regulation, and Finance Division, World Bank Institute—is part of a larger effort in the institute to disseminate the lessons of experience and best practices in infrastructure finance and risk management. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact William Nedrow, room J3-283, telephone 202-473-1585, fax 202-676-9874, email address wnedrow@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at mdailami@worldbank.org or rhauswald@rhsmith.umd.edu. (48 pages)

2713. Causes of Inequality in Health: Who You Are? Where You Live? Or Who Your Parents Were?

Adam Wagstaff, Pierella Paci, and Heather Joshi
(November 2001)

What explains inequality in health status among young adults in England and Wales? Inequalities in income and housing tenure play the biggest part.

Data from the British National Child Development Study show that, among 33-year-olds, ill health (as measured by cardinalized responses to a question on self-assessed health) is concentrated among the worse off. Wagstaff, Paci, and Joshi seek to decompose the inequalities in health status into their socioeconomic causes.

In this decomposition, inequalities in health status depend on inequalities in each of the underlying determinants of health and on the elasticities of health status with respect to each of these determinants. The authors estimate these elasticities using regression models that allow for unobserved heterogeneity at the community level.

They find that inequalities in unobserved community-level influences account for only 6 percent of health inequality, and inequalities in parental education and social class for only 4 percent. Inequalities in income and housing tenure account for most health inequality, though inequalities in educational attainment and in math scores at age seven also play a part.

This paper—a joint product of Public Services for Human Development, Development Research Group, and the Office of the Vice President, Human Development Network—is part of a larger effort in the Bank to investigate the links between poverty and health. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedy Sladovich, mail stop MC3-311, telephone 202-473-7698, fax 202-522-1154, email address hsladovich@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at awagstaff@worldbank.org, ppaci@worldbank.org, or hj@cls.ioe.ac.uk. (20 pages)

2714. On Decomposing the Causes of Health Sector Inequalities with an Application to Malnutrition Inequalities in Vietnam

Adam Wagstaff, Eddy van Doorslaer, and Naoko Watanabe
(November 2001)

A method for decomposing inequalities in the health sector into their causes is developed and applied to data on child malnutrition in Vietnam.

Wagstaff, van Doorslaer, and Watanabe propose a method for decomposing inequalities in the health sector into their causes, by coupling the concentration index with a regression framework. They also show how changes in inequality over time, and differences across countries, can be decomposed into the following:

- Changes due to changing inequalities in the determinants of the variable of interest.
- Changes in the means of the determinants.
- Changes in the effects of the determinants on the variable of interest.

The authors illustrate the method using data on child malnutrition in Vietnam. They find that inequalities in height-for-age in 1993 and 1998 are accounted for largely by inequalities in household consumption and by unobserved influences at the commune level. And they find that an increase in such inequalities is accounted for largely by changes in these two influences.

In the case of household consumption, rising inequalities play a part, but more important have been the inequality-increasing effects of rising average consumption and the increased protective effect of consumption on nutritional status. In the case of unobserved commune-level influences, rising inequality and general improvements seem to have been roughly equally important in accounting for rising inequality in malnutrition.

This paper—a joint product of Public Services for Human Development, Development Research Group, and the Development Data Group—is part of a larger effort in the Bank to investigate the links between health and poverty. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedy Sladovich, room MC3-607, telephone 202-473-7698, fax 202-522-1154, email address hsladovich@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at awagstaff@worldbank.org, vandoorslaer@econ.bmg.eur.nl, or nwatanabe@worldbank.org. (19 pages)

2715. Paying for Health Care: Quantifying Fairness, Catastrophe, and Impoverishment, with Applications to Vietnam, 1993–98

Adam Wagstaff and Eddy van Doorslaer
(November 2001)

Egalitarian concepts of fairness in health care payments (requiring that payments be linked to ability to pay) are compared with minimum standards approaches (requiring that payments not exceed a prespecified share of prepayment income or not drive households into poverty). The arguments and methods are illustrated using data on out-of-pocket health spending in Vietnam in 1993 and 1998.

Wagstaff and van Doorslaer compare egalitarian concepts of fairness in health care payments (requiring that payments be linked to ability to pay) and minimum standards approaches (requiring that payments not exceed a prespecified share of prepayment income or not drive households into poverty). They develop indices for both sets of approaches.

The authors compare the "agnostic" approach, which does not prespecify exactly how payments should be linked to ability to pay, with a recently proposed approach that requires payments to be proportional to ability to pay. They link the two approaches using results from the income redistribution literature on taxes and deductions, arguing that ability to pay can be thought of as prepayment income less deductions deemed necessary to ensure that a household reaches a minimum standard of living or food consumption.

The authors show how both approaches can be enriched by distinguishing between vertical equity (or redistribution) and horizontal equity, and show how these can be quantified. They develop indices for "catastrophe" that capture the intensity of catastrophe as well as its incidence and also allow the analyst to capture the degree to which catastrophic payments occur disproportionately among poor households. Their measures of the poverty impact of health care payments also capture both intensity and incidence.

To illustrate the arguments and methods, the authors use data on out-of-pocket health spending in Vietnam in 1993 and 1998—an interesting application, since 80 percent of health spending in that country was out-of-pocket in 1998. They find that out-of-pocket payments had a smaller disequalizing effect on income distribution in 1998 than 1993, whether income is measured as prepayment income or as ability to pay (that is, prepayment income less deductions, regardless of how deductions are defined). The underlying cause of the smaller disequalizing effect of out-of-pocket payments differs depending on whether the benchmark distribution is prepayment income or ability to pay.

The authors find that the incidence and intensity of catastrophic payments—in terms of both prepayment income and ability to pay—declined between 1993 and 1998, and that both the incidence and the intensity of catastrophe became less concentrated among the poor. They also find that the incidence and intensity of the poverty impact of out-of-pocket payments diminished over the period. Finally, they find that the poverty impact of out-of-pocket payments is due primarily to poor people becoming even poorer rather than the nonpoor becoming poor and that in Vietnam in 1998 it was not expenses associated with inpatient care that increased poverty but nonhospital expenditures.

This paper—a product of Public Services for Human Development, Development Research Group—is part of a larger effort in the group to investigate the links between poverty and health. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedy Sladovich, room MC3-607, telephone 202-473-7698, fax 202-522-1154, email address hsladovich@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at awagstaff @worldbank.org or vandoorslaer@econ. bmg.eur.nl. (48 pages)

2716. Does Foreign Bank Penetration Reduce Access to Credit in Developing Countries? Evidence from Asking Borrowers

George R. G. Clarke, Robert Cull,
and Maria Soledad Martinez Peria
(November 2001)

How does entry by foreign banks affect lending to small and medium-size enterprises in developing countries? Analysis of data from a large cross-country survey of enterprises finds that foreign bank entry benefits firms of all sizes, although it seems to benefit larger firms more.

Existing evidence on the effect of foreign bank penetration on lending to small and medium-size enterprises is ambiguous. Case studies of developing countries show that foreign banks lend less to such firms than domestic banks do. But cross-country studies find that foreign bank entry fosters competition and reduces interest rates, benefits that should extend to all firms.

Clarke, Cull, and Martinez Peria use data from a large cross-country survey of enterprises to investigate this issue. Their results suggest that foreign bank penetration improves financing conditions (both the quantities of financing and the terms) for enterprises of all sizes, although it seems to benefit larger firms more.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to understand the impact of entry by foreign banks on domestic banking systems in developing countries. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Sintim-Aboagye, room MC3-422, telephone 202-473-7644, fax 202-522-1155, email address psintimaboagye@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at gclarke @worldbank.org, rcull@worldbank.org, or mmartinezperia@worldbank.org (37 pages)

2717. Bridging the Economic Divide within Nations: A Scorecard on the Performance of Regional Development Policies in Reducing Regional Income Disparities

Raja Shankar and Anwar Shah
(November 2001)

What is the record of policies aimed at reducing income disparities among regions within countries? Paradoxically, creating a level playing field helps disadvantaged regions more than do paternalistic protectionist policies.

Regional inequalities represent a continuing development challenge in most countries, especially those with large geographic areas. Globalization heightens these challenges because it places a premium on skills: since rich regions typically also have better educated and better skilled labor, the gulf between rich and poor regions widens.

While central governments in unitary states are relatively unconstrained in their choice of policies for reducing regional disparities, in a federation the division of powers curtails federal flexibility in policy choice. Thus in federal states large regional disparities can represent serious threats, with the state's inability to deal with such inequities creating potential for disunity and, in extreme cases, for disintegration. Inequalities beyond a threshold may lead to calls for separation by both the richest and the poorest regions. While the poorest regions may consider the inequalities a manifestation of regional injustice, the richest regions may view the union with the poorest regions as holding them back in their drive toward prosperity.

Under these circumstances, there is a presumption in development economics that decentralized fiscal arrangements would lead to ever widening regional inequalities. Shankar and Shah provide an empirical test of this hypothesis.

The authors conclude that regional development policies have failed in almost all countries, federal and unitary alike. Among 10 countries with high or substantial regional income inequality, only one (Thailand) has experienced convergence in regional incomes. Still, federal countries do better in restraining regional inequalities, because of the greater political risk these disparities pose for such countries.

The authors classify countries by degree of convergence in regional incomes:

- *Countries experiencing regional income divergence*—Brazil, China, India, Indonesia, the Philippines, Romania, the Russian Federation, Sri Lanka, and Vietnam.
- *Countries experiencing no significant change in regional income variation*—Canada and Mexico.
- *Countries experiencing regional income convergence*—Chile, Pakistan, Thailand, the United States, and Uzbekistan.

Regional development outcomes observed in these countries provide a revealing look at the impact of regional development policies. While countries experiencing divergence tend to focus on interventionist policies, those experiencing convergence have taken a hands-off approach to regional development and instead focused on promoting an economic union by removing barriers to factor mobility and ensuring minimum standards in basic services across the nation. In Chile, for example, convergence in regional incomes is largely attributable to liberalizing the economy and removing distortions so that regions could discover their own comparative advantage. In Pakistan and the United States convergence is attributable to greater factor mobility. Paradoxically, creating a level playing field helps disadvantaged regions more than do paternalistic protectionist policies.

This paper—a product of the Country Evaluation and Regional Relations Division, Operations Evaluation Department—is part of a larger effort in the department to evaluate decentralization programs and policies. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Santos, room H3-306, telephone 202-473-1675, fax 202-522-3124, email address asantos @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at raja@mit.edu or ashah@worldbank.org. (54 pages)

2718. Liberalizing Basic Telecommunications: The Asian Experience

Carsten Fink, Aaditya Mattoo, and Randeep Rathindran

Despite the move away from traditional public monopolies, most Asian governments are still unwilling to allow unrestricted entry in telecommunications, eliminate limits on private and foreign ownership, and establish strong, independent regulators. But where comprehensive reform has been undertaken—including privatization, competition, and regulation—the availability of main lines, the quality of service, and the productivity of labor are significantly higher.

Fink, Mattoo, and Rathindran examine the liberalization of the basic telecommunications sector in Asian countries with a view to identifying good policy and determining how multilateral negotiations can promote it. They find that most Asian governments, despite the move away from traditional public monopolies, are still unwilling to allow unrestricted entry, eliminate limits on private and foreign ownership, and establish strong, independent regulators. But where comprehensive reform has been undertaken—including privatization, competition, and regulation—the availability of main lines, the quality of service, and the productivity of labor are significantly higher.

Somewhat surprisingly, little unilateral liberalization has occurred since the last round of telecommunications negotiations under the General Agreement on Trade in Services (GATS). The new round therefore faces the challenge of not merely harvesting unilateral liberalization, as in the past, but of negotiating away existing restrictions.

Since quantitative restrictions on the number of telecommunications service suppliers are pervasive, deepened GATS rules could help ensure transparent and nondiscriminatory allocation of licenses. There may also be a need to sharpen the regulatory principles established in the last round and to create rules that safeguard not only the rights of foreign suppliers but also those of consumers.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to assess the implications of liberalizing trade in services. This research is supported in part by the U.K. Department for International Development. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Robert Simms, room MC3-333, telephone 202-473-7156, fax 202-522-1159, email address rsimms@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at cfink@worldbank.org, amattoo@worldbank.org, or rrathindran@worldbank.org. (28 pages)

2719. Is There a Positive Incentive Effect from Privatizing Social Security? Evidence from Latin America

Truman G. Packard
(November 2001)

Introducing individual retirement accounts has a positive incentive effect that increases the share of the economically active population contributing to the reformed pension system. But this effect occurs only gradually as employers and workers become familiar with the new set of social insurance institutions put in place by reform.

There is increasing concern among policymakers that social security reforms that involve a transition to individual retirement savings accounts may exclude certain groups of workers from coverage against the risk of poverty in old age. While most public pay-as-you-go systems pool the risk of interrupted careers and periods of low earnings over the covered population, the reformed systems shift the burden of these risks to the individual. Adequate coverage under a system of individual retirement accounts depends critically on accumulating sufficient savings through regular contributions.

In developing countries where opportunities for unregulated employment abound and workers can easily escape mandated social insurance, theory suggests that reforms will increase the number of contributors to social security by reducing distortions and improving incentives in the labor market. Motivated primarily by fiscal pressures stemming from the deficits of overly generous, poorly administered public pension systems, many governments are going ahead with reforms as if this theory is correct.

Does a shift to individual retirement accounts improve the incentives to contribute to social security? Almost a decade after reforms to national social security systems in Latin America (two decades, in the case of Chile), existing evidence is mixed. Several studies have found that the share of the Chilean workforce covered by the national pension system has increased since individual retirement accounts were installed in 1981; others have shown that there has been no change in this share. But these studies rely on simulations or on casual observation of data on the sectoral allocation of the labor force and relate only to Chile. Sufficient time has now passed since reforms in several Latin American countries to allow more rigorous testing of the theory.

Packard estimates the impact of social security reform—specifically, the transition from a purely public pay-as-you-go system to one with private individual retirement accounts—on the share of the workforce that contributes to formal retirement security systems. To test the predictions of a simple model of a segmented labor market, he exploits variation in data from a panel of 18 Latin American countries, observed from 1980 to 1999.

Results show that introducing individual retirement accounts has a positive incentive effect that, other things equal, increases the share of the economically active population contributing to the reformed system. But this effect occurs only gradually as employers and workers become familiar with the new set of social security institutions put in place by reform.

This paper—a product of the Human Development Sector Unit, Latin America and the Caribbean Region—is part of a regional study on social security reform. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Truman Packard, room I7-151, telephone 202-458-9078, fax 202-614-0832, email address tpackard@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. (27 pages)

2720. International Migration and the Global Economic Order: An Overview

Andrés Solimano
(November 2001)

Global capitalism, vintage 21st century, is less friendly to the international migration

of unskilled people than were previous waves of globalization (such as that of the late 19th century). A freer regime for international migration could help to reduce global economic inequality, improve the allocation of world resources, and ease labor shortages during periods of rapid growth. But the flight of human capital, talent, and entrepreneurs can be detrimental for developing countries.

Global capitalism, vintage early 21st century, favors the movement of goods and capital across national borders more than it does the movement of people. It was not always this way. The first wave of globalization, in the second half of the 19th century and the early 20th, came with massive international migration. Around 60 million people migrated from Europe to the countries of the New World (Argentina, Australia, Brazil, Canada, and the United States) over a period of 40 years or so. In a sense, current globalization has a smaller degree of "cosmopolitan liberalism" in the dimension of international migration.

While there is consensus on the benefits of an open trade regime and relatively liberal capital movements, that consensus rarely extends to the free movement of people. Solimano examines this difference in the "freedom to become global" by looking at both standard trade theory, basically the Mundell theorem of trade and migration as substitutes, and the ensuing analytical developments and empirical evidence around the Mundell result. He then looks at this asymmetry in today's global economic order from the perspective of freedom, individual rights, and transnational citizenship, as well as the potential of international migration to reduce global inequality.

Preventing factor (labor or human capital) movements from lower- to higher-productivity activities (countries) may entail a global welfare loss in terms of forgone world output (although the distributive consequences for sending and receiving countries vary). International migration tends to reduce income disparities across countries. But it can increase inequality within labor-scarce receiving countries by moderating the growth of wages, because of the associated increase in the supply of labor. In contrast, in sending countries emigration can have an equalizing effect by reducing the supply of labor and raising wages.

Still, international migration is bound to have a positive effect on long-run growth in receiving countries by keeping labor costs down, increasing the profitability of investment, and raising national savings. For sending countries, the impact on growth depends on the pool of labor and human resources that emigrate. In labor-abundant developing countries with chronic unemployment (or labor surplus), the growth-depressing effects of emigration can be small (compensated in part by labor remittances). Nevertheless, the emigration of highly educated people, professionals, and national investors can have a detrimental effect on long-run income levels and growth rates for sending countries.

From a global perspective, however, world output would be expected to increase if people could freely move across the planet from areas of low labor productivity to areas of high labor productivity. From the viewpoint of global economic freedoms, the result would be equally positive.

This paper—a product of Macroeconomics and Growth, Development Research Group—is part of a larger effort in the group to study the process of globalization and its links with economic development. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Ana Regina Bonfield, room MC3-354, telephone 202-473-1248, fax 202-522-3518, email address abonfield@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at asolimano@eclac.cl. (41 pages)

2721. Implications for South Asian Countries of Abolishing the Multifibre Arrangement

Sanjay Kathuria, Will Martin, and Anjali Bhardwaj
(November 2001)

Modeling results suggest that South Asia as a whole will gain from the abolition of the quotas under the Multifibre Arrangement. Unambiguously, however, the gains from domestic reform will increase after the abolition of the Arrangement as export demand becomes more price responsive.

Kathuria, Martin, and Bhardwaj provide a simple introduction to the economics of the Multifibre Arrangement (MFA) and use available empirical evidence to examine its impact on exports of garments and textiles, focusing on India. Their review of the basic economics of the MFA shows the discriminatory character of the Arrangement. While exporting countries can gain from quota rents, much of this gain is likely to be offset by losses in exports to unrestricted markets, through waste resulting from domestic rent-seeking behavior, or shared with industrial country importers. Moreover, the restrictions curtail the ability of countries to generate sorely needed employment in the labor-intensive garment and textile sectors. Recent estimates for India of the export tax equivalents of the quotas suggest that they increased in 1999, after a couple of years around lower levels.

The authors also examine the domestic policy distortions affecting the industry in India. While the abolition of quotas on international trade in textiles in 2005 will create opportunities for developing countries, it will also expose them to additional competition from other, formerly restrained exporters. The outcome for any country will depend on its policy response. Countries that use the opportunity to streamline their policies and improve their competitiveness are likely to increase their gains from quota abolition. Modeling results suggest that South Asia as a whole will gain from quota abolition, although different countries may experience different results. Unambiguously, however, the gains from domestic reform will increase after the abolition of the quota arrangement.

This paper—a product of Trade, Development Research Group and the South Asia Region—is part of a larger effort in the Bank to understand the impact of trade distortions and analyze domestic policy responses. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Maria Lourdes Kasilag, room MC 3-321, telephone 202-473-9081, fax 202-522-1159, email address mkasilag@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at wmartin1@worldbank.org, skathuria @worldbank.org, or anjali@winrock.ernet.in. (23 pages)

2722. Japan's Official Development Assistance: Recent Issues and Future Directions

Masahiro Kawai and Shinji Takagi
(November 2001)

Japan can meet domestic and international challenges to its aid policies by developing a coherent national strategy for official development assistance, broadly designed to enhance partnership, effectiveness, accountability, and transparency.

Japan remains the world's largest national donor of aid funds. But the Japanese government, facing prolonged economic stagnation and mounting public sector debt, is under increasing public pressure to reduce aid budgets and to use official development assistance in more explicit pursuit of Japan's own economic and political interests. Internationally, Japan continues to attract criticism for its emphasis on infrastructure projects and its limited willingness to participate in multilateral partnerships.

Kawai and Takagi argue that Japan can meet these domestic and international challenges by developing a coherent national strategy for official development assistance, broadly designed to enhance effectiveness, accountability, and transparency.

This paper—a product of the Office of the Chief Economist, East Asia and Pacific Region—is part of a larger effort in the region to study financial market development, capital flows, and exchange rate arrangements in East Asia. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Joyce Rompas Mendrofa, room MC8-808, telephone 202-458-1885, fax 202-522-1557, email address jrompasmendrofa@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at kawai@iss.u-tokyo.ac.jp or takagi@econ.osaka-u.ac.jp. (29 pages)

2723. Using Development-Oriented Equity Investment as a Tool for Restructuring Transition Banking Sectors

Helo Meigas
(November 2001)

Development-oriented equity investment, undertaken in the context of World Bank projects, can assist in promoting sound banking systems, especially through its positive impact on bank governance. This was the experience of Swedfund Financial Markets that made equity investments in banks in the Baltic republics of Estonia, Latvia, and Lithuania.

Over the past 10 years the three Baltic republics have undertaken significant restructuring of their banking sectors, supported by the World Bank through three projects: the Financial Institutions Development Project in Estonia, the Enterprise and Financial Sector Restructuring Project in Latvia, and the Enterprise and Financial Sector Project in Lithuania. These projects included a credit line, channeled through local commercial banks, to provide long-term funding and complementary technical assistance to private enterprises. In parallel, the government of Sweden injected equity into the commercial banks from Swedfund Financial Markets (SFM). The projects and the accompanying Swedfund equity were aimed at promoting sound banking systems in the three Baltic countries—by strengthening the equity in the banks and thereby expanding medium- and long-term financing.

Meigas examines the role of SFM—which provides development-oriented equity investment (DEI) to Baltic banks—in the context of the World Bank programs. She examines the arguments for deploying DEI as a development vehicle by gauging its impact in the three Baltic countries on banking skills and services, on capitalization, and on shareholder structure and board membership. She draws out the role of technical assistance and compares its impact with that of DEI, and explores the possibilities offered by DEI for imposing sound corporate governance. The author also describes the necessary ingredients for successful DEI.

The author's analysis shows that the Baltic projects were valuable initiatives that could in principle be replicated in other transition or developing economies whose banking sector faces serious restructuring challenges. A development-oriented equity investment, like that made by SFM, can address the important deficiencies in a banking sector that is still in a rudimentary state, lacking both capital and banking skills. SFM's most effective tool was the imposition of sound corporate governance on the institutions that received the equity injection. This approach provided a powerful supplement to the banking supervisory functions. Rather than relying on the external enforcement power of state supervision, SFM targeted internal processes to change business practices. As a result, the DEI led to improvements in the corporate culture and broader risk management and thus in the quality of banking services—not only meeting the institutional development objectives but also ensuring an adequate return on the invested capital.

The potential of good corporate governance for easing the work of banking supervisors has been stressed by the Basle Committee on Banking Supervision. This potential is particularly valuable in countries still developing the supervisory function, and DEI, the author argues, is well suited for the task of improving corporate governance.

This paper—a product of the Private and Financial Sectors Development Sector Unit, Europe and Central Asia Region—is part of a larger effort in the region to disseminate the results of successful policy initiatives in the financial sector. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Sylvia Torres, room H6-216, telephone 202-473-9012, fax 202-522-0005, email address storres@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at helo_meigas@mckinsey.com. (23 pages)

2724. Tropical Bubbles: Asset Prices in Latin America, 1980–2001

Santiago Herrera and Guillermo Perry
(November 2001)

The authors examine if observed asset prices in Latin America depart significantly from fundamentals-determined levels. These departures, or bubbles, are found to be equally determined by both country-specific and common external variables, contrary to previous studies that found that local factors were predominant in asset price determination in Latin America.

Herrera and Perry test for the existence of asset price bubbles in Latin America in 1980–2001, focusing mainly on stock prices. Based on unit root and cointegration tests, they find that they cannot reject the hypothesis of bubbles.

They arrive at the same conclusion using Froot and Obstfeld's intrinsic bubbles model.

To examine empirical regularities of these bubble episodes in the region, the authors identify periods of significant stock price overvaluation. They quantify the relative importance of different factors that determine the probability of bubble occurrence, focusing on the contrast between the country-specific variables and the common external factors. They include as country-specific variables both the level and the volatility of domestic credit growth, the volatility of asset returns, the capital flows to each country, and the terms of trade. As common external variables, they consider the degree of asset overvaluation in the U.S. stock and real estate markets and the term spread of U.S. Treasury securities. To quantitatively assess the relative importance of each factor, they estimate a logit model for a panel of five Latin American countries from 1985 to 2001.

In general, the authors find that the marginal probabilities of common and country-specific variables are of roughly the same order of magnitude. This finding contrasts with those of previous studies that real asset returns in Latin America are dominated by local factors.

Finally, the authors explore the main channels through which asset prices affect real economic activity, with the most important being the balance sheet effect and its impact on bank lending. They show how the allocation of bank lending across different sectors responded sensitively to real estate prices during the boom years in countries that experienced banking crises. Thus asset price bubbles have long-lasting effects in the financial sector and, through this channel, on growth. Another channel through which asset prices—particularly stock market prices—affect long-run growth is through their effect on investment. The authors find a strong positive association between stock prices and investment and a negative effect of stock price volatility on investment. An additional motive for the central bank to monitor asset prices is the general coincidence of the crash episodes identified by the authors with currency crises in the region in the past two decades.

This paper—a product of the Office of the Chief Economist, Latin America and the Caribbean Region—is part of a larger effort to understand asset pricing in the region, and to examine the relationship between asset prices and other variables, such as domestic credit and capital flows. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Ruth Izquierdo, room I8-012, telephone 202-458-4161, fax 202-522-7528, email address rizquierdo@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at sherrera @worldbank.org or gperry@worldbank.org. (58 pages)

2725. Bank Regulation and Supervision: What Works Best?

James R. Barth, Gerard Caprio Jr., and Ross Levine
(November 2001)

The regulatory and supervisory practices most effective in promoting good performance and stability in the banking sector are those that force accurate information disclosure, empower private sector monitoring of banks, and foster incentives for private agents to exert corporate control.

Barth, Caprio, and Levine draw on their new database on bank regulation and supervision in 107 countries to assess different governmental approaches to bank regulation and supervision and evaluate the efficacy of different regulatory and supervisory policies.

First, the authors assess two broad and competing theories of government regulation: the *helping-hand* approach, according to which governments regulate to correct market failures, and the *grabbing-hand* approach, according to which governments regulate to support political constituencies.

Second, they assess the effect of an extensive array of regulatory and supervisory policies on the development and fragility of the banking sector. These policies include the following:

- Regulations on bank activities and the mixing of banking and commerce.
- Regulations on entry by domestic and foreign banks.
- Regulations on capital adequacy.
- Design features of deposit insurance systems.
- Supervisory power, independence, and resources; stringency of loan classification; provisioning standards; diversification guidelines; and powers to take prompt corrective action.
- Regulations governing information disclosure and fostering private sector monitoring of banks.
- Government ownership of banks.

The results raise a cautionary flag with regard to reform strategies that place excessive reliance on a country's adherence to an extensive checklist of regulatory and supervisory practices that involve direct government oversight of and restrictions on banks. The findings, which are much more consistent with the grabbing-hand view of regulation than with the helping-hand view, suggest that the regulatory and supervisory practices most effective in promoting good performance and stability in the banking sector are those that force accurate information disclosure, empower private sector monitoring of banks, and foster incentives for private agents to exert corporate control.

This paper—a joint product of Finance, Development Research Group, and the Financial Sector Strategy and Policy Department—is part of a larger effort in the Bank to analyze the effect of financial sector regulation on development. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Yaptenco, room MC3-446, telephone 202-473-8526, fax 202-522-1155, email address ayaptenco@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at jbarth @business.auburn.edu, gcaprio@worldbank.org, or rlevine@csom.umn.edu.

2726. Applying the Decision Rights Approach to a Case of Hospital Institutional Design

Florence Eid
(November 2001)

A study of a corporatized hospital in Lebanon shows that service delivery can be improved when there are appropriate incentives and mechanisms for risk sharing

Corporatization, a hybrid between public sector ownership and privatization, is an organizational form that is increasingly being adopted in the social sectors. In the health sector, the high costs of public hospitals, new technological developments, changes in demand for primary and secondary health care, and efficiency considerations have necessitated shifts in organizational boundaries, leading to conversions in hospital ownership. In the past decade hospitals have been converted from public to nonprofit and from nonprofit to for-profit in industrial and developing countries alike.

The debate around these conversions has centered mostly on the tradeoff between equity and efficiency involved in the shift from public to private provision of services. Eid argues that more important than this dichotomy is creating appropriate incentives and matching incentives with goals through institutional design.

Because corporatization combines elements of both private and public ownership, it is difficult to design. Among the challenges is deciding where on the spectrum from a budgetary unit to a privatized enterprise a hospital should lie. Another challenge is aligning incentives—not just within the hospital but also between the hospital and the ministry of health.

Eid draws on the decision rights approach to analyze how an innovative hospital in Lebanon, Hôpital Dahr El-Bachek (HDB), corporatized itself and became the best in the public sector over a period of seven years. To study HDB's experience, she develops a decision rights analysis framework that tracks the formation, evolution, and dilution of decision rights. She finds that:

- There are important lessons from bottom-up, demand-driven institutional design that can inform the design of top-down, supply-driven institutions, such as laws and regulations.
- An understanding of mechanisms of risk sharing and high-powered incentives created from the bottom up can inform the design of corporatized organizations.
- Key to good design are decision rights complementarities that provide the most complete (and flexible) contract possible, regardless of where ownership lies.

In designing systemwide institutions for corporatization, Eid argues, risk transfer is important in satisfying the two most important objectives of the reform. The first objective is establishing hard budget constraints to control sectoral costs. At HDB, the decision right to raise revenue through user fees was complemented by decision rights that created accountability and legal liability. Together, these decision rights kept spending within HDB's means—in contrast with international experience with corporatization, where budget deficits have been a perennial problem. However, the informality of the decision rights precluded the exercising of those created to design long-term financial policy, resulting in timid capital expenditure plans.

The second important objective of corporatization is improving hospital performance, including providing better service at a low cost for the patient. Eid argues that high-powered incentives are key. Among the most interesting of HDB's decision rights allocations was the pairing of claimant and control rights to produce high-powered incentives for the director. Not surprisingly, the most successful examples of corporatization worldwide have experimented with incentive schemes for hospital managers that seek to provide high-powered incentives in this way.

This paper—a product of the Country Evaluation and Regional Relations Division, Operations Evaluation Department—is part of a larger effort in the department to evaluate the performance of public sector institutions. The study was funded by the Bank's Research Support Budget under the research project "Analyzing Problems in Public Hospital Corporatization Using Information Economics." Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Santos, room H3-306, telephone 202-473-1675, fax 202-522-3124, email address asantos@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at florenceid@aol.com. (50 pages)

2727. Hospital Governance and Incentive Design: The Case of Corporatized Public Hospitals in Lebanon

Florence Eid
(November 2001)

Representation of community and government interests on hospital boards can balance the competing concerns of reducing costs and increasing the quality of service provision in corporatized hospitals.

There are three potential levels of government activity in the health sector: regulation, finance, and direct provision of services, with the government owning and managing hospitals and primary care clinics. Eid focuses on service provision.

In recent years corporatization has been introduced as an institutional design for public hospitals—as a means of improving efficiency and reducing transfers in a publicly owned, decentralized health system. Eid treats decentralization as a reallocation of decision rights to lower levels of the public sector. She shows how such a strategy creates new needs for monitoring and control of decentralized units.

To improve the understanding of the role of governance and incentives in corporatized hospitals, Eid explores the design of corporate boards of public hospitals, the institutional linchpin of such systems. She shows how principal-agent theory, particularly the multitasking and common agency approaches, can provide a useful analytical lens in understanding hospital board design in the case of Lebanon. She also shows the implications of corporatization for health policy and management.

This paper—a product of the Country Evaluation and Regional Relations Division, Operations Evaluation Department—is part of a larger effort in the department to evaluate the performance of public sector institutions. The study was funded by the Bank's Research Support Budget under the research project "Analyzing Problems in Public Hospital Corporatization Using Information Economics." Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Santos, room H3-306, telephone 202-473-1675, fax 202-522-3124, email address asantos@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at florenceid@aol.com. (51 pages)

2728. Evaluating Emergency Programs

William F. Maloney
(December 2001)

Conventional measures of project quality are not reliable indicators of the value of investment or employment components of emergency programs. The inclusion of these components has costs and benefits that must be somewhat subjectively weighed against those of a benchmark *"smart" transfer that costlessly reaches the target beneficiary.*

Emergency programs are designed to soften the impact of economic crises—income shocks experienced by an entire community or country—on consumption and human capital accumulation. Of particular concern are poor people: as a result of inadequate savings or inadequate access to credit or insurance markets, the poor are unable to draw on resources from better times to offset a loss in income today. Further, the systemic nature of the shocks means that risk cannot be effectively pooled through local informal insurance mechanisms.

Emergency interventions have included social funds, workfare programs, training programs, conditional transfers (linked to health center visits or children's school attendance, for example), and traditional direct, unconditional transfers in kind (such as communal tables or targeted food handouts).

Maloney highlights some conceptual problems in choosing among these options and evaluating one program of a certain type relative to another. It argues that most such interventions can be thought of as containing both a transfer and an investment component and that their evaluation as *emergency* programs needs to more explicitly incorporate the intertemporal nature of their design. More specifically, the mandated investments in physical or human capital will benefit the poor, but only in the future—after the crisis—and their implementation diverts resources from alleviating present hardship. This needs to be reflected in the discount factor used to evaluate these investments. Maloney argues that the way emergency programs are financed, particularly the way the burden is shared between central and municipal governments, also has important implications for the criteria for evaluation.

The analysis suggests that most conventional means of evaluating projects—net present value at market discount rates, labor intensity, cost per job created—may not be relevant or are at least ambiguous in the context of emergency programs. As a result, policymakers are left with few "hard" indicators with which to evaluate such programs. Maloney argues for an approach in which the policymaker weighs the appropriateness of deviations from the theoretically "ideal" benchmark program, which delivers a "smart" transfer costlessly to the target beneficiary, and discusses the arguments for or against these deviations. The modest goal of the proposed approach is to clarify the key issues and provide more solid grounding for the necessarily subjective judgment calls that policymakers will inevitably have to make.

This paper—a product of the Poverty Reduction and Economic Management Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to improve the design of safety nets. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Anne Pillay, room I8-104, telephone 202-458-8046, fax 202-522-2119, email address apillay@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at wmaloney@worldbank.org. (24 pages)

2729. International Evidence on the Value of Product and Geographic Diversity

Luc Laeven
(December 2001)

Corporate diversification destroys value due to both agency and influence costs. Consistent with this finding, insider ownership is associated with less corporate diversification.

Laeven examines the effect of product and geographic diversification on firm value for a sample of 1,914 corporations in 18 countries. His results indicate that both product and geographic diversification destroy value at high levels of diversification, suggesting that agency and influence costs arising from the increased complexity outweigh the benefits of diversification at high levels. Geographic diversification is valuable at low levels, however.

The author finds that insider ownership is associated with less diversification, across both product and geographic segments, suggesting that insiders view corporate diversification as value destroying.

This paper—a product of the Financial Sector Strategy and Policy Department—is part of a larger effort in the department to study corporate financing problems around the world. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Rose Vo, room MC9-624, telephone 202-473-3722, fax 202-522-2031, email address hvo1@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at llaeven@worldbank.org. (34 pages)

2730. Antidumping as Safeguard Policy

J. Michael Finger, Francis Ng,
and Sonam Wangchuk
(December 2001)

Developing countries are now using antidumping more frequently than its traditional users such as the United States. It has become a real threat to continuing liberalization by developing countries.

Antidumping is by far the most prevalent instrument applied by countries to impose new import restrictions. In the 1980s antidumping was used mainly by a handful of industrial countries. More recently developing countries have used it increasingly often. Since the World Trade Organization (WTO) Agreements went into effect in 1995, developing countries have initiated 559 antidumping cases, developed countries 463 (through June 2000). Per dollar of imports, ten developing countries have initiated at least five times as many antidumping cases as the United States. Even so, the WTO community continues to take up antidumping as if it were a specialized instrument. In reality, present WTO rules allow it to be applied in any instance of politically troubling imports.

Finger, Ng, and Wangchuk argue that, as a "pressure valve" to help maintain an open trade policy, antidumping has serious weaknesses: Its technical strictures do not distinguish between instances that advance rather than harm the national economic interest. And its politics of branding foreigners as unfair strengthens rather than mutes pressures against liberalization.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to support trade liberalization and to make trade policy work for development. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC

20433. Please contact Robert Simms, mail stop MC3-303, telephone 202-473-7156, fax 202-522-1159, email address rsimms @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at mfinger@aei.org or fng@worldbank.org. (22 pages)

2731. An Alternative Technical Education System in Mexico: A Reassessment of CONALEP

Gladys López-Acevedo
(December 2001)

The results of this paper appear to indicate that CONALEP is a highly cost-effective program. CONALEP has had spillover effects on the rest of the technical education system in Mexico by stimulating other educational institutions to be more efficient.

Using matched pair methods, López-Acevedo reevaluates the labor market performance of graduates of Mexico's Colegio Nacional de Educación Profesional Técnica (CONALEP), the country's largest technical education system. She also assesses the impact of innovations introduced by CONALEP in 1991.

The analysis shows that individuals in the control group find jobs faster than CONALEP graduates do, but a larger share of CONALEP graduates work in an occupation consistent with their field of specialization or training. CONALEP graduates earn 20–28 percent more than the control group. And employers invest more in training CONALEP graduates than they do in training individuals in the control group.

López-Acevedo shows that the innovations introduced by CONALEP increase graduates' probability of finding a job and shorten their job search. A cost-benefit analysis appears to show that CONALEP is an effective training system.

This paper—a product of Poverty Reduction and Economic Management Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to reduce poverty and inequality through human capital investment. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Michael Geller, room I4-046, telephone 202-458-5155, fax 202-522-2112, email address mgeller@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at gacevedo@worldbank.org. (74 pages)

2732. The Unbalanced Uruguay Round Outcome: The New Areas in Future WTO Negotiations

J. Michael Finger and Julio J. Nogués
(December 2001)

In mercantilist economics the North was a big winner over the South at the Uruguay Round—in real economics an even bigger winner.

The Uruguay Round involved a grand North-South bargain: The North reduced import barriers, particularly in textiles and agriculture. The South adopted new domestic regulations in such areas as services and intellectual property—changes that would lead to increased purchases from the North. In mercantilist economics, apples for apples—imports for imports. In real economics, apples for oranges.

Finger and Nogués argue that while the North's reduction of import barriers benefits both the North and the South, the new domestic regulations adopted by countries of the South could prove costly to those countries. To begin with, the regulations will be expensive to implement. And while the cost side of their impact is secured by a legal obligation (in the case of intellectual property rights, for example, the cost is higher prices for patented goods), the benefits side is not so secured.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to help developing countries to use the WTO as an effective instrument for development and was supported in part by the World Bank/Netherlands Partnership. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Robert Simms, mail stop MC3-303, telephone 202-473-7156, fax 202-522-1159, email address rsimms@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at mfinger @aei.org or jnogues@infovia.com. (19 pages)

2733. Trade Policy Reform and Poverty Alleviation

Bernard Hoekman, Constantine Michalopoulos, Maurice Schiff, and David Tarr
(December 2001)

How to implement trade liberalization as part of a strategy for alleviating poverty in developing countries.

In this paper, developed as part of the World Bank's Poverty Reduction Strategy Sourcebook, Hoekman, Michalopoulos, Schiff, and Tarr examine how to implement trade liberalization as part of a strategy for alleviating poverty in developing countries. They discuss trade policy instruments, institutions, complementary policies, sector issues, adjustment policies, and safety nets in an integrated approach to trade policy as a tool for poverty alleviation.

The authors examine the patterns or models of trade policy that have been successful in alleviating poverty. They discuss the role of tariffs, nontariff barriers, contingent protection (such as safeguards and antidumping), special import regimes (such as duty drawback), export taxes, export subsidies, and trade-related institutions (such as standards, marketing, export finance, customs clearance, and regional trade arrangements).

The authors also discuss policies that complement successful trade reform, including macroeconomic stability, a competitive exchange rate, flexible labor markets, competitive product markets, and policies that do not discriminate against foreigners in investment. They suggest approaches to policies and institutions in services and agriculture, key sectors in poverty reduction. They explain the roles of retraining and safety nets in dealing with the adjustment costs of trade liberalization. Finally, the authors elaborate guidelines for implementing trade reform and explain tools for assessing whether trade reform will help or harm the poor in particular sectors in the short run.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to understand the links between trade reforms and poverty reduction. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Rebecca Martin, room MC3-308, telephone 202-473-9065, fax

202-522-1159, email address rmartin1 @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at bhoekman @worldbank.org, cmichalopoulos @worldbank.org, mschiff@worldbank.org, or dtarr@worldbank.org. (44 pages)

2734. Agricultural Markets in Benin and Malawi: The Operation and Performance of Traders

Marcel Fafchamps and Eleni Gabre-Madhin
(December 2001)

Surveys of the operation of agricultural traders in two Sub-Saharan African countries suggest that their performance would benefit from policies aimed at increasing their asset base, reducing transaction risk, promoting more sophisticated business practices, and reducing physical marketing costs.

Drawing on original surveys of agricultural traders, Fafchamps and Gabre-Madhin examine how traders operate in two Sub-Saharan African countries, Benin and Malawi. They find the following:

- The largest transaction costs for traders are search and transport. Search methods rely principally on personal visits by the trader, which raises search costs. And since enterprises are very small, transport represents a large share of marketing costs.
- Brand recognition, grading, and quality certification are nonexistent.
- Brokers and agents are not organized in commodity exchanges.
- Quantities are not pooled for transport and storage so as to achieve returns to scale.
- Interseasonal and interregional arbitrage is not feasible for most traders, who prefer to operate day to day in a small territory.

This information provides some important insights into how agricultural trade could be improved. It suggests possible policy interventions in four main areas: increasing traders' asset base, reducing transaction risk, promoting more sophisticated business practices, and reducing physical marketing costs.

This paper—a product of Rural Development, Development Research Group—is part of a larger effort in the group to understand the operation of commodity markets in rural areas. The study was funded by the Bank's Research Support Budget under the research project "Markets for Agricultural Inputs in Sub-Saharan Africa" (RPO 683-48). Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Pauline Kokila, room MC3-305, telephone 202-473-3716, fax 202-522-1151, email address pkokila@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at marcel.fafchamps@economics.oxford.ac.uk or e.gabre-madhin@cgiar.org. (68 pages)

2735. Shifting Tax Burdens through Exemptions and Evasion: An Empirical Investigation of Uganda

Bernard Gauthier and Ritva Reinikka
(December 2001)

Tax burdens vary for firms of different sizes due to their variable tendency to seek exemptions or evade taxes.

Gauthier and Reinikka look at how prevalent tax exemptions and evasion are among businesses in Uganda, how they translate into actual tax burdens for firms of different sizes, and how the tax administration attempts to ensure compliance.

Despite tax reforms undertaken in 1995–97 to increase the efficiency and equity of the tax system and its administration, exemptions and evasion during this three-year period remained widespread and the dispersion of the tax burden did not decrease.

The analysis shows that tax evasion is more prevalent among smaller firms, that tax exemptions are more common among larger firms, and that medium-size firms tend to shoulder a disproportionate share of the total tax burden.

This paper—a product of Public Services for Human Development, Development Research Group—is part of a larger effort in the group to study public policy (including tax policy), public expenditure, and service delivery. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedy Sladovich, mail stop MC3-311, telephone 202-473-7698, fax 202-522-1154, email address hsladovich@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at Bernard.Gauthier@hec.ca or rreinikka @worldbank.org. (25 pages)

2736. Social Policy and Macroeconomics: The Irish Experience

F. Desmond McCarthy
(December 2001)

Many factors underlie the remarkable success of the Irish economy in the 1990s. This paper focuses on the role of the European Union, foreign direct investment, and a remarkable series of social pacts.

The remarkable performance of the Irish economy in recent years has attracted much attention. Within a 10–year period the economy went from an 18 percent unemployment rate to nearly full employment, while the ratio of debt to GDP fell from 120 percent to less than 50 percent. Inevitably, this success was also accompanied by problems, as infrastructure came under increasing stress, environmental difficulties became more evident, and a changing social structure resulted in some groups becoming increasingly marginalized.

What worked and what did not? In particular, are there lessons that may be relevant for other countries facing similar difficulties, especially in Asia and Latin America?

McCarthy focuses on three features of Ireland's economic achievements. Two of these features are external: the opening to Europe and the role of foreign direct investment. The third and perhaps most "exportable" feature is domestic: the role of a social pact. This pact was initially between employers, trade unions, and the government. Subsequent pacts were extended to include a variety of other groups. McCarthy discusses the far-reaching impact of this series of pacts on health, poverty, employment, education, and social welfare.

Ireland now faces a number of challenges, including the slowdown in the global economy, a fall in resource transfers from the European Union, and the potential effects of the entry into the EU of Hungary and Poland.

This paper—a product of Development Dialogue on Values and Ethics, External

Affairs, with support under the ASEM Trust Fund—is part of a larger effort in the Bank to explore and present European social policy experience relevant for the East Asia post crisis. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Julie Turner, room U11-1109, telephone 202-458-1767, fax 202-522-7524, email address jturner@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at fmccarthy@worldbank.org. (27 pages)

2737. Mode of Foreign Entry, Technology Transfer, and Foreign Direct Investment Policy

Aaditya Mattoo, Marcelo Olarreaga, and Kamal Saggi
(December 2001)

When technology transfer is costly, a foreign firm and host country government may differ in their preferences over direct entry and acquisition. Government intervention could help induce the socially preferred choice.

Foreign direct investment can take place through the direct entry of foreign firms or the acquisition of existing domestic firms. Mattoo, Olarreaga, and Saggi examine the preferences of a foreign firm and the host country government with respect to these two modes of foreign direct investment in the presence of costly technology transfer. The tradeoff between technology transfer and market competition emerges as a key determinant of preferences.

The authors identify the circumstances in which the choices of the government and the foreign firm diverge—and in which domestic welfare can be improved by restrictions on foreign direct investment that induce the foreign firm to choose the socially preferred mode of entry.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to understand the determinants of trade in services in developing countries. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Rebecca Martin, room MC3-308, telephone 202-473-9065, fax 202-522-1159, email address rmartin1@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at amattoo@worldbank.org, molarreaga@worldbank.org, or ksaggi@mailsmu.edu. (34 pages)

2738. Assisting the Transition from Workfare to Work: A Randomized Experiment

Emanuela Galasso, Martin Ravallion, and Agustin Salvia
(December 2001)

A wage subsidy increased private sector employment among poor workers in a welfare-dependent region of Argentina, but extra skill training had no impact.

Randomly sampled workfare participants in a welfare-dependent region of Argentina were given a voucher that entitled an employer to a sizable wage subsidy. A second sample also received the option of skill training, while a third sample formed the control group.

Galasso, Ravallion, and Salvia analyze the effects of this scheme on participants' employment and income, using double-difference and instrumental-variables methods to deal with potential experimental biases, including selective compliance with the randomized assignment.

The authors find that compared with the control group, voucher recipients had a significantly higher probability of employment, though their current incomes were no higher. The impact was largely confined to women and younger workers. Labor supply effects appear to have been important. However, training had no significant impact.

The experiment was cost-effective in reducing the government's welfare spending, since take-up of the subsidy by employers was low.

This paper—a product of the Poverty Team, Development Research Group—is part of a larger effort in the group to assess the impact of social protection programs. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Catalina Cunanan, room MC3-542, telephone 202-473-2301, fax 202-522-1151, email address ccunanan@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at egalasso@worldbank.org or mravallion@worldbank.org. (26 pages)

2739. Poverty, Education, and Health in Indonesia: Who Benefits from Public Spending?

Peter Lanjouw, Menno Pradhan, Fadia Saadah, Haneen Sayed, and Robert Sparrow
(December 2001)

Static and dynamic incidence analysis underscores the importance of Indonesia's public spending on primary health care to the poor. In education, evidence suggests that the poor are well represented in primary schooling and would benefit from increased public provisioning of secondary schooling.

Lanjouw and his coauthors investigate the extent to which Indonesia's poor benefit from public and private provisioning of education and health services. Drawing on multiple rounds of SUSENAS household surveys, they document a reversal in the rate of decline in poverty and a slowdown in social sector improvements resulting from the economic crisis in the second half of the 1990s.

Carrying out traditional static benefit-incidence analysis of public spending in education and health, the authors find patterns consistent with experience in other countries: spending on primary education and primary health care tends to be pro-poor, while spending on higher education and hospitals is less obviously beneficial to the poor. These conclusions are tempered once one allows for economies of scale in consumption which weaken the link between poverty status and household size.

The authors also examine the incidence of changes in government spending. They find that the marginal incidence of spending in both junior and senior secondary schooling is more progressive than what static analysis would suggest, consistent with "early capture" by the nonpoor of education spending. In the health sector marginal and average incidence analysis point to the same conclusion: the greatest benefit to the poor would come from an increase in primary health care spending.

This paper—a joint product of the Poverty Team, Development Research Group, and the Poverty Reduction and Economic

Management Sector Unit, East Asia and Pacific Region—is part of a larger effort in the group to trace the distributional impact of public spending decisions. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Patricia Sader, room MC3-556, telephone 202-473-3902, fax 202-522-1153, email address psader@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at planjouw @worldbank.org, mpradhan@worldbank.org, fsaadah@worldbank.org, or hsayed @worldbank.org. (63 pages)

2740. Are Men Benefiting from the New Economy? Male Economic Marginalization in Argentina, Brazil, and Costa Rica

Omar Arias
(December 2001)

Have economic reforms in Latin America led to a deterioration in men's ability to be economically self-sufficient? Household survey data on unemployment and real wage growth for distinct groups of male workers in 1988–97 show no evidence of a general trend of male economic marginalization.

The economies of Latin America have undergone extensive reforms, raising concerns about how these changes have affected the labor market. But there is also increasing concern that the reforms may have deeper social ramifications as the new economies strain the ability of certain groups of men to work and to earn good wages, fulfilling their traditional role as providers.

Using household surveys broadly covering the period 1988–97 in urban areas of Argentina, Brazil, and Costa Rica, Arias examines the patterns of unemployment and real wage growth for distinct groups of male workers to see whether there is evidence of a deterioration in men's ability to be economically self-sufficient. He finds no general trend of male economic marginalization.

The incidence and duration of unemployment have increased the most for the typically vulnerable group—young, less educated, informal sector workers—but the increased duration of unemployment has also affected older and more educated men. With respect to wages, density and quantile regression analysis indicates that the usual stories of wage marginalization of vulnerable workers can hardly explain the observed variety of wage growth patterns in the three countries. The positive wage performance has been concentrated mainly in the higher quantiles of the *conditional* wage distribution. This suggests that differences in unobservable worker characteristics, such as industriousness, labor market connections, and quality of schooling, have been key determinants of the ability of male workers in the region to adapt to economic restructuring.

These results suggest that assistance should be targeted to some groups so that frustrations in asserting an economic identity do not lead to aggressive behavior. But they also show that we must look elsewhere for the roots of the increase in socially dysfunctional behavior.

This paper—a product of the Gender Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to understand the role of gender in developing country labor markets. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Selpha Nyairo, room I8-110, telephone 202-473-4635, fax 202-522-0054, email address snyairo@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at omara @iadb.org. (42 pages)

2741. Female Wage Inequality in Latin American Labor Markets

Luz A. Saavedra
(December 2001)

In three Latin American countries that introduced structural reforms, quantile regression results show, female workers with less human capital saw wage gains relative to female workers with more human capital.

Saavedra uses quantile regression to document the evolution of the earnings structure of salaried and self-employed female workers in urban areas in three Latin American countries—Argentina, Brazil, and Costa Rica—after structural reforms were introduced. The analysis covers pre- and post-reform years: in Argentina, 1988 and 1997, and in Brazil and Costa Rica, 1989 and 1995. Four primary results emerge from the analysis:

- After other characteristics are controlled for, wage premiums to human capital, labor experience, and other characteristics vary along the conditional distribution. This indicates that a homoscedastic model is not suitable for analyzing wage differentials among working women in these countries.
- Wage inequality among women fell in the self-employment sector in all three countries. In the salaried sector results were mixed, with wage inequality declining in Argentina but increasing slightly in Costa Rica.
- The decline in female wage inequality can be explained in part by changes in the premium to education. Results indicate that the relative premium to education fell in Argentina and Brazil—that is, the adjusted wage differential between more educated and less educated women decreased between the sampled years in these countries. In contrast, wage differentials arising from education increased in Costa Rica.
- Women earning less than their characteristics would predict seemed to fare well with the economic opening: domestic workers, nonwhite workers, and the least educated in the lower quantiles saw their wage premiums increase relative to those of the control groups.

These results are consistent with the predictions of the Heckscher-Ohlin theory of trade liberalization: those with less human capital saw wage gains relative to those with more human capital.

This paper—a product of the Gender Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to understand the role of gender in developing country labor markets. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Selphia Nyairo, room I8-110, telephone 202-473-4635, fax 202-522-0054, email address snyairo@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at lsaavedra@coba.usf.edu. (49 pages)

2742. Sectoral Allocation by Gender of Latin American Workers over the Liberalization Period of the 1990s

Wendy V. Cunningham
(December 2001)

Did the types of jobs that men and women hold change during the recent period of economic reforms in Argentina, Brazil, and Costa Rica? Among both men and women in all three countries (except Brazilian men), workers have become more likely to hold informal wage jobs and less likely to hold formal sector jobs.

The recent restructuring of Latin American economies has renewed interest in the effects of trade liberalization on labor markets and on the gender division of labor. Cunningham does not attempt to establish causality between economic reforms and the types of jobs that men and women hold. Instead, she provides a detailed description of the trends in male and female formal and informal sector participation during the economic reform period in Argentina, Brazil, and Costa Rica.

Cunningham first compares the gender composition of the formal, informal wage, and self-employment sectors in a year before reforms (1988 for Argentina, 1989 for Brazil and Costa Rica) and a year after reforms (1997 for Argentina, 1995 for Brazil and Costa Rica). Although women continued to be more likely than men to work in the informal wage sector, there is no trend of masculinization or feminization of the informal sector or any other. Instead, in Argentina men have overtaken women as the most prevalent workers in the informal wage sector, while in Brazil the opposite has occurred (as men move into self-employment). In Costa Rica there have been no statistically observable changes.

The author then considers the distribution across sectors within each gender group to identify whether men and women are more likely to select different sectors in the post-reform period relative to the pre-reform period. Among both men and women in all three countries (except Brazilian men), workers have become more likely to hold informal wage jobs and less likely to hold formal sector jobs. Trends in human capital accumulation explain these changes for both men and women, while changes in gender roles, primarily in homecare and marriage, do not seem to have an effect.

This paper—a product of Gender Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to understand the role of gender in developing country labor markets. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Selpha Nyairo, room I8-110, telephone 202-473-4635, fax 202-522-0054, email address snyairo@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at wcunningham@worldbank.org. (45 pages)

2743. Breadwinner or Caregiver? How Household Role Affects Labor Choices in Mexico

Wendy V. Cunningham
(December 2001)

Is gender a primary determinant of patterns of participation in the labor force among adult men and women with different household responsibilities? No, although gender affects employment decisions indirectly, through household role. Labor patterns are more similar for men and women who have the same household role.

Recent volatility in the Mexican economy has required households to alter patterns of participation in the labor force, voluntarily or not. Cunningham uses panel data to examine patterns of labor force entry among adult men and women with different household responsibilities, asking whether gender is a primary determinant shaping these patterns.

She finds that labor supply patterns are driven more by household role than by gender. Heads of households, regardless of sex, behave similarly. Women who have neither spouses nor children behave more like men than like married women. They are also more likely than any other group to have inflexible, higher-paying jobs in the formal sector—which raises the question: Do employers discriminate based on gender or on household structure?

She also detects a strong added-worker effect among secondary workers, a result not detected in the labor markets of developed countries that have social insurance programs.

Finally, she finds that wives' choice of sector during downturns is subject to the households' earning needs, that husbands use informal wage or contract employment as an employer of last resort only in response to negative income shocks to the household, and that single mothers do not select the informal sector over the formal sector in response to either expected or realized negative income shocks.

The policy implications? Interventions that target women aren't necessarily appropriate because women are heterogeneous. And programs that aid household heads—male or female—should be directed toward employment that will last beyond the economic shock.

This paper—a product of the Gender Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to understand the role of gender in developing country labor markets. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Selpha Nyairo, room I8-110, telephone 202-473-4635, fax 202-522-0054, email address snyairo@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at wcunningham@worldbank.org. (48 pages)

2744. Gender and the Allocation of Adult Time: Evidence from the Peru LSMS Panel Data

Nadeem Ilahi
(December 2001)

Analysis of time use data for Peru in 1994 and 1997 shows that women work up to a fifth more than men do and that women in poor households work more than those in rich ones, while there is no difference for men.

Ilahi analyzes the determinants of intrahousehold time use in Peru in 1994 and 1997. She tests whether sickness, unemployment, the provision of water and energy services, and other factors affect the time use of men and women differently.

The results show that women work up to a fifth more than men do and that women in poor households work more than those in rich ones, while there is no difference for men. Women's work is concentrated in housework and men's in income-generating activities.

Sickness does not affect the work burdens of men or women, but it alters the composition: men work more in income-generating activities, and women tend the sick. Men bear a greater burden from female unemployment than do women from male unemployment. Improvements in the provision of water and energy services affect the time use of both men and women. And finally, demographic and life-cycle variables are as important as gender in explaining differences in time use.

This paper—a product of the Gender Sector Unit, Latin America and the Caribbean Region—was originally written for the recent World Bank publication *Engendering Development*. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Selpha Nyairo, room I8-110, telephone 202-473-4635, fax 202-522-0054, email address snyairo @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. (36 pages)

2745. Children's Work and Schooling: Does Gender Matter? Evidence from the Peru LSMS Panel Data

Nadeem Ilahi
(December 2001)

Econometric analysis based on panel data from Peru finds that changes in household welfare affect girls' work and schooling more than boys'.

Using panel data from Peru, Ilahi investigates the determinants of the allocation of boys' and girls' time to schooling, housework, and income-generating activities. Specifically, she explores whether sickness, female headship, access to infrastructure, and employment of women in the household have different impacts on the time use of boys and girls.

Girls mostly engage in housework, and boys mostly work outside the home. As a work activity, housework responds to economic incentives and constraints.

The author's econometric findings suggest that changes in household welfare affect girls' work and schooling more than boys'. Even though boys' and girls' educational attainment rates are the same, girls' education responds more to changes in household welfare than does boys'. Similarly, girls are more likely than boys to adjust their home time in response to changes in adult female employment and to sickness of household members. Lack of access to energy infrastructure lowers the educational attainment of both boys and girls but has little affect on their labor.

The traditional approach to the determinants of child labor and education excludes housework and may understate children's time use, particularly that of girls. It may therefore also overlook an important gender dimension of education policy. Safety nets that protect household incomes from employment shocks and sickness, and childcare programs that allow women to work, would reduce the likelihood of girls being pulled out of school.

This paper—a product of the Gender Sector Unit, Latin America and the Caribbean Region—was originally written for the recent World Bank publication *Engendering Development*. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Selpha Nyairo, room I8-110, telephone 202-473-4635, fax 202-522-0054, email address snyairo @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. (37 pages)

2746. Complementarity between Multilateral Lending and Private Flows to Developing Countries: Some Empirical Results

Dilip Ratha
(December 2001)

Even though multilateral loans may have behaved countercyclically with respect to private flows to developing countries in the short term, these flows tended to complement private flows in the medium term by signaling—and often fostering—a better investment environment in the borrowing country.

Despite the surge in private capital flows in the 1990s, lending by the multilateral development banks continues to be a significant source of external finance for low-income and lower-middle-income countries. And for middle-income countries, which receive the lion's share of private flows, multilateral lending has played an important stabilizing role during times of credit rationing.

Even though multilateral loans may have behaved countercyclically with respect to private flows in the short term, these loans also tended to complement private flows in the medium term by signaling—and often fostering—a better investment environment in the borrowing countries.

This paper—a product of the Development Prospects Group—is part of a larger effort in the group to understand the relationship between official flows and private flows to developing countries. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Sara Crow, room MC2-358, telephone 202-473-0763, fax 202-522-2578, email address scrow @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at dratha@worldbank.org. (23 pages)

2747. Are Public Sector Workers Underpaid? Appropriate Comparators in a Developing Country

Sarah Bales and Martín Rama
(December 2001)

Does the public sector overpay or underpay workers relative to what they could earn in the private sector? Usual comparisons focus on similar jobs, but in a developing country it is more sensible to focus on similar workers, as shown by the case of Vietnam.

How is public sector compensation best aligned with the market? In industrial countries a common reference is the salary paid by private employers for similar jobs (the "jobs approach"). But comparable jobs are formal, and in developing countries the relevant alternative for many public sector workers is informal sector employment.

Another approach uses as a reference the earnings of similar workers in the private sector, regardless of whether their jobs are formal or informal (the "workers approach"). A potential shortcoming of this approach is that workers may differ in characteristics that are unobservable. Bales and Rama assess the importance of this shortcoming by relying on five econometric methods, four of which correct the bias from unobservable characteristics.

The authors focus on state-owned enterprises in Vietnam, which recruited workers on the basis of political loyalty and other unobservable characteristics. A massive downsizing program, which led to the departure of the most entrepreneurial workers, may have exacerbated the selection bias. However, all the results obtained with the workers approach fall within a relatively narrow range. They suggest that workers in state-owned enterprises are overpaid by 20 percent or more. In contrast, the jobs approach indicates that they could earn two to six times more in the private sector.

This paper—a product of Public Services for Human Development, Development Research Group—is part of a larger effort in the group to understand employment and pay issues in the public sector. The study was funded by the Bank's Research Support Budget under the research project "Efficient Public Sector Downsizing" (RPO 683-67). Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedy Sladovich, mailstop MC3-311, telephone 202-473-7698, fax 202-522-1154, email address hsladovich@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Martín Rama may be contacted at mrama@worldbank.org. (37 pages)

2748. Deposit Dollarization and the Financial Sector in Emerging Economies

Patrick Honohan and Anqing Shi
(December 2001)

An increasing share of bank deposits in developing countries is denominated in foreign currency. This trend may have adverse implications for the cost and availability of credit.

Analyzing new data, Honohan and Shi find that the general trend toward increased use of foreign-currency-denominated bank deposits in emerging markets has continued, despite declines in a few countries. Their analysis of the new data suggests that a sizable fraction (about half, on average) of funds switched to dollar deposit accounts are effectively exported through the banking system, thereby reducing the supply of credit. Moreover, increases in deposit dollarization are associated with increases in offshore deposits, which probably helps to explain the authors' finding that dollarization is associated with an increase in banking spreads.

The authors' evidence supports, though only weakly, the conjecture that dollarization would tend to raise wholesale interest rates systematically through a peso premium. In contrast, greater dollarization is clearly associated with a higher pass-through coefficient from exchange rate change to consumer prices, potentially increasing nominal risk in the economy.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to assess the impact of financial globalization. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Yaptenco, room MC3-446, telephone 202-473-8526, fax 202-522-1155, email address ayaptenco@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Patrick Honohan may be contacted at phonohan@worldbank.org. (27 pages)

2749. Loan Loss Provisioning and Economic Slowdowns: Too Much, Too Late?

Luc Laeven and Giovanni Majnoni
(December 2001)

Most banks around the world delay provisioning for bad loans until it is too late—when cyclical downturns have already set in. The size and timing of loan loss provisions tend to improve with the level of economic development.

Only recently has the debate on bank capital regulation devoted specific attention to the role that bank loan loss provisions can play as part of a minimum capital regulatory framework. Several national regulators have adopted or are planning to introduce a cyclically adjustable requirement for loan loss provisions, and the Basel Committee on Banking Supervision is considering how to provide adequate treatment to provisioning practices within a broad bank capital regulatory framework.

Laeven and Majnoni contribute to the ongoing debate by exploring the available evidence about bank provisioning practices around the world. They find that in the vast majority of cases banks tend to delay provisioning for bad loans until it is too late—when cyclical downturns have already set in—possibly magnifying the impact of the economic cycle on the income and capital of banks.

Notwithstanding the considerable variation in the patterns followed by banks around the world, Laeven and Majnoni find that the size and timing of provisions tend to improve with the level of economic development.

This paper—a product of the Financial Sector Strategy and Policy Department—is part of a larger effort in the department to study the impact of financial regulation on economic development. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Rose Vo, room MC9-624, telephone 202-473-3722, fax 202-522-2031, email address hvo1@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at llaeven@worldbank.org or gmajnoni@worldbank.org. (27 pages)

2750. The Political Economy of Commodity Export Policy: A Case Study of India

Masanori Kondo
(December 2001)

Trade liberalization programs often fail because they neglect domestic political realities. Wise policy reform helps interest groups focus on efficient, productive activities by transforming one group into another and by enhancing politically desirable alliances among groups.

Many developing country governments discriminate against sectors that export primary commodities. India, for example, discriminates against cotton production. Exports of cotton have been restricted by quotas, and the mill industry has been subject to such regulations as the obligation to supply hank yarn for Indian handlooms.

These interventions have led to stagnating cotton yields, rent-seeking activities, manipulation of cotton statistics, and low profitability in cotton mills' offsetting the short-run benefits of inexpensive cotton in India.

Kondo develops a numerical model to measure the impact of liberalizing cotton exports. This is the first simulation model of its type, and the first multimarket model that computes price elasticities endogenously, based on the ratios between product prices and input costs. The model distinguishes short-run from long-run effects by drawing on the principle that the cost of capital varies only in the long run.

Results of the simulation under complete liberalization indicate heavy (16 percent) net losses in income in the handloom sector. The government subsidies needed to compensate for those losses amount to US$423 million, or about 25 percent more than current government revenue in India's cotton sector.

Such costly subsidy of handlooms is undesirable not only budgetarily but also politically, because it creates new vested interests.

Kondo proposes politically feasible programs for managing the adverse impact of liberalization on the handloom sector, including handloom conversion and involvement of mills in cotton cultivation.

Governments tend to prefer an export quota to an export tax because it is easier to change a quota than a tax rate if market conditions change. But flexible controls actually facilitate rent-seeking activities. As quotas are changed more often than tax rates, more interest groups get involved in lobbying and in padding crop estimates.

In other words, the political and economic problems that result from restrictions on commodity exports can be more serious than those relating to resource misallocation. It is important to consider how policy changes will affect the political power structure and the objectives of different interest groups.

This paper—a product of the Rural Development Sector Unit, South Asia Region—is part of a larger effort in the region to enhance rural development in India. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Dina Umali-Deininger, room MC10-159, telephone 202-473-0419, fax 202-522-2420, email address dumali@worldbank.org@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at masanori@icu.ac.jp. (62 pages)

2751. Contractual Savings Institutions and Banks' Stability and Efficiency

Gregorio Impavido, Alberto R. Musalem, and Thierry Tressel
(December 2001)

This paper argues that contractual savings (assets of pension funds and life insurance companies) contribute to the improvement of banks' efficiency, credit, and liquidity risk. The authors use bank level panel data across countries to assess the impact of contractual savings on bank efficiency and lending behavior. They concentrate on profitability measures and on term transformation and credit risk indicators.

Impavido, Musalem, and Tressel analyze the relationship between the development of contractual savings institutions and banks' efficiency, credit, and liquidity risks. They discuss the potential mechanisms through which the development of contractual savings institutions may affect the banking sector. They show that the development of contractual savings institutions has a significant impact on bank spreads and loan maturity.

After controlling for banks' characteristics, macroeconomic factors, and more standard indicators of financial development, they show that the development of contractual savings institutions is associated with increased efficiency of the banking system and greater resilience to credit and liquidity risks.

This paper—a product of the Financial Sector Development Department—is part of a larger effort in the department to study the effects of contractual savings on financial markets. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Patricia Braxton, room MC9-704, telephone 202-473-2720, fax 202-522-7105, email address pbraxton@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at gimpavido@worldbank.org, amusalem@worldbank.org, or tressel@delta.ens.fr. (27 pages)

2752. Investment and Income Effects of Land Regularization: The Case of Nicaragua

Klaus Deininger and Juan Sebastian Chamorro
(January 2002)

In situations where tenure insecurity is pervasive (as in Nicaragua), systematic efforts of land regularization can have positive effects on productivity as well as equity.

Deininger and Chamorro use data from Nicaragua to examine the impact of the award of registered and nonregistered title on land values and on investments attached to land. They find that receipt of registered title increases land values by 30 percent and greatly increases the propensity to invest, bringing investment closer to the optimum.

Consistent with descriptive statistics indicating great demand for regularization of land rights, especially from the poor, this finding suggests that titling can have a positive distributional effect. Of overriding importance, however, are the legal validity and official recognition of the titles issued.

This paper—a product of Rural Development, Development Research Group—is part of a larger effort in the group to explore the impact of land policies on household welfare and productivity. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Maria Fernandez, room MC3-542, telephone 202-473-3766, fax 202-522-1151, email address mfernandez2@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at kdeininger@worldbank.org or jscja,prrp@hotmail.com. (29 pages)

2753. Unemployment, Skills, and Incentives: An Overview of the Safety Net System in the Slovak Republic

Carolina Sánchez-Páramo
(January 2002)

Do unemployment insurance and social assistance payments have disincentive effects on job seeking behavior and the *duration of unemployment in the Slovak Republic? The evidence suggests they do.*

Sánchez-Páramo studies the potential disincentive effects of unemployment insurance and social assistance payments on the duration of unemployment in the Slovak Republic. For this purpose, she uses new, very detailed data on receipt of benefits from the Unemployment Registry (1990–2000) and the Labor Force Survey (1996, 1999, and 2000). She employs a flexible methodology that makes it possible to identify behavioral changes that may occur as the quantity and duration of the benefits change over time, as well as behavioral differences between recipients and nonrecipients. This approach, she argues, constitutes a more accurate test for the presence of incentive and disincentive effects than those presented before in the literature. She expands the scope of her analysis to study the effect of receiving benefits on several outcomes in addition to exit from unemployment (for example, job seeking behavior and duration of unemployment).

She finds important behavioral differences between those who receive benefits and those who do not. Recipients tend to spend more time unemployed, but they also look for employment more actively than their counterparts, have more demanding preferences with respect to their future jobs, and find jobs in the private sector more often. In addition, these jobs turn out to be better matches than those obtained by nonrecipients (with the quality of the match measured by its duration).

Moreover, the behavior of recipients varies tremendously depending on whether they are actually receiving benefits or not. Once their benefits are exhausted, they exit the Unemployment Registry at a higher rate, search more actively, and move into private sector jobs more often. So when these workers are used as their own control group, there is strong evidence that both unemployment insurance and social assistance or support have important disincentive effects, not only on the duration of unemployment, but also on job seeking behavior and on exit to employment.

Analyzing the effect of unemployment insurance and social assistance on poverty, Sánchez-Páramo concludes that these programs bear most of the burden in the fight against poverty. But this protection does not come free, since significant disincentive effects are associated with receiving benefits. Thus any reform plan should take into account both of these aspects of the programs, along with the government's goals for the programs.

This paper—a product of the Poverty Reduction and Economic Management Sector Unit, Europe and Central Asia Region—is part of a larger effort in the region to help governments reform safety net systems to make them more efficient and effective, without losing a poverty focus. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Carolina Sánchez-Páramo, room I8-105, telephone 202-473-2583, fax 202-522-0054, email address csanchezparamo @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. (60 pages)